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No. 50

THE ECONOMY OF GROUND SQUIRREL DESTRUCTION.

By J. D. LONG, Surgeon, United States Public Health Service.

Every farmer or rancher who has had to contend with ground squirrels, gophers, or similar pests, has been aware for years that these animals have caused great losses each year through damage done by eating or destroying growing crops, such as hay, grain, fruits, nuts, vegetables, etc.; through damage to young trees, vines, and other nursery stock or seedlings; through damage to crops and fields that has resulted from flooding of the land due to breaks in irrigation ditches and canal banks, such breaks being due, in most instances, to burrows made into the banks by ground squirrels or gophers. Further, frequent interruptions to railroad traffic, and sometimes loss of life, have occurred through cave-ins in railroad cuts and washouts in embankments that have had their beginning through flood or surface water finding its way through a ground-squirrel burrow to a place where damage could result. In addition, even though washouts did not occur, subsidence of ties and rails took place, due to individual burrows or colonies caving in, with resulting increase in maintenance-of-way charges and repairs to rolling stock and rails, due to pounding, and on rail ends and joints.

In California, from July 1, 1913, to November 1, 1914, the Public Health Service has caused ground squirrels to be reduced about 90 per cent over an area of 3,373,146 acres, which includes about 2,000 miles of railroad right of way. The average cost for labor and materials has been about 17.4 cents per acre, and the average infestation has been about 6.5 squirrels per acre. From the above it is estimated that about 21,925,449 ground squirrels have been destroyed. As a result of the above-described operations, it is believed that bubonic plague has, for all practical purposes, been eradicated from the State of California and that any further danger of its spread has been removed.

During the progress of this work of squirrel destruction so many comments were made by farmers, landowners, ranchers, and others

as to the savings that had resulted, that it was decided to make an attempt to collect data and see if any reliable conclusions could be drawn from the replies sent in. To this end a circular letter was addressed to supervising inspectors in charge of the various counties, accompanied by a supply of blank forms to be filled out by farmers, ranchers, and others. The circular letter and blank form are given below:

[Circular letter.]

UNITED STATES PUBLIC HEALTH SERVICE,
111 NEW MONTGOMERY STREET,
San Francisco, Cal., September 24, 1914.

To Supervising Inspectors:

There are forwarded you, under separate cover, 250 blank forms, which you are directed to apportion between yourself and your field inspectors.

These blanks are to be taken to those landowners in the various districts who have effected practical squirrel destruction, with the request that for the good of the work and in the interest of its future continuance the questions on the blanks be filled out as accurately as may be possible and the blanks signed.

All the information furnished will be considered as CONFIDENTIAL as far as individuals are concerned, and only the total results of the investigation in each county will be used. *Names of individuals will not be given out except by consent,* as indicated on the blanks.

Signature is desired only as evidence of the authenticity of the report.

Instruct your field inspectors to render such assistance in filling out the blanks as may seem necessary or desirable, in order that the information obtained may be as nearly accurate as possible.

Supervising inspectors are directed to forward all complete blanks to headquarters as soon as they are received, in order that the compilation of the information may be proceeded with at once.

(Signed) J. D. LONG,
Surgeon in Charge Field Operations and Laboratory.

[Blank form.]

-----, CALIFORNIA,

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It is requested that landowners and others supply the following information in order that the economic benefits of squirrel destruction may be more clearly known and in order that actual data on this subject may be compiled.

Give figures as nearly accurate as possible on property controlled by you.

Location of property: T_____, R_____, sec_____, or _____ grant.

Total acres _____

Number of acres under cultivation_____

Number of acres in pasture_____

Number of acres wooded_____

LAND UNDER CULTIVATION.

Kind of crop_____

Method used to destroy squirrels_____

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Amount of money expended in squirrel destruction (labor and material) \$-----
Estimated increase in crops due to the destruction of squirrels, as compared to
previous years (in tons or pounds of crops)-----

What was the increase in crop worth?-----

Has your land increased in value, due to the destruction of ground squirrels
(if so, how much per acre)?-----

PASTURE LAND.

Method used to destroy squirrels-----

Amount of money expended in squirrel destruction (labor and material) \$-----

How much has your pasture land increased in value, due to the destruction of
ground squirrels?-----

Can you pasture more stock on your land, now that your squirrels are destroyed,
than you could before?-----

If so, how many head?-----

Give the acreage of the pasture land on which your figures are based-----

REMARKS.

Under this heading give any other benefits that may have resulted from the
destruction of squirrels, such as saving on repairs to canals or irrigation-ditch
banks, savings on young trees or nursery stock, or on grain or other products
that may have been stored for future use.

My name may be referred to in connection with this report, if deemed necessary.

(If it is desired that the name of the signer is not to be referred to, cross out
the preceding sentence.)

(Sign here.)-----

From September 24, 1914, to November 1, 1914, 497 replies had
been received. The information given had apparently been care-
fully compiled, and is believed to be as accurate as can be obtained.

Only the increase in crop is taken into consideration, this increase
being figured on the basis of the average crop for preceding years,
when ground squirrels were present and taking their annual toll.

The 497 replies received represent a total area of 321,233 acres;
the total sum reported as expended for squirrel destruction over this
area amounted to \$36,091.85, or an average of 11.2 cents per acre;
the value of the savings realized over this area from the destruction
of ground squirrels amounted to \$109,301.50, or an average saving
of 34 cents per acre, which represents a return of 303.5 per cent in
the first year.

To illustrate the savings on each particular type of crop or in-
dustry, the following figures, taken from the returns as compiled,
are given:

Cultivated Lands.

171 persons saved 1,746 tons of hay-----	value \$15,890.50
249 persons saved 2,415.4 tons of grain-----	do 50,144.50
76 persons saved 208.5 tons of fruits-----	do 5,338.50
15 persons saved 18,395 pounds of nuts-----	do 1,882.00
36 persons saved 287 tons of vegetables-----	do 4,026.00

Three hundred and seventy of the above persons estimated that their land had increased in value \$2.74 per acre as a direct result of squirrel destruction. (This figure of \$2.74 per acre increase in value has not been included in the total savings of \$109,301.50 given above.)

Pasture Lands.

One hundred and fifty-two persons reported that 2,163 more head of cattle could be pastured on 150,845 acres of pasture land than could be pastured before squirrels were destroyed, or 1 additional horse or cow to each 69.7 acres of pasture. This saving alone, estimated at the usual figure of \$1 per month per head, represents a saving of \$25,976.

One hundred and sixty-eight persons estimated that their pasture land had increased in value \$1.17 per acre as a direct result of squirrel destruction. (This figure of \$1.17 per acre has not been included in the total savings of \$109,301.50 previously given.)

Various Savings.

Twenty-one persons reported savings of \$2,331 in repairs to irrigation canal banks, but made no estimate as to losses due to flooding in previous years. Average saving per person, \$111.

Thirty-six persons reported "great savings on repairs to ditch and canal banks," but made no estimate of the amount saved.

Twenty-two persons reported savings of \$2,188 on young trees, an average of \$99 per person.

Nine persons reported savings of \$1,525 on grain and other products that were kept in storage in granaries, etc.; average saving, \$169.44 per person.

The great majority, under the heading of remarks, expressed their satisfaction with the results obtained and hoped that the work would be continued until ground squirrels were entirely eliminated.

It is thoroughly realized by all interested parties that, to obtain good and satisfactory results of a permanent nature in work of this character, the Federal, State, and county governments and the people themselves must work in complete and harmonious cooperation through some such organization as has been at work during the past year.

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Summary.

Replies received.....	497
Amount expended in squirrel destruction on 321,233 acres.....	\$36,091.85
Amount expended per person.....	\$72.61
Amount saved as a direct result of squirrel destruction.....	\$109,301.50
Amount saved per person.....	\$201.81

CYANIDE FUMIGATION OF SHIPS.**METHOD USED AT NEW ORLEANS.**

By NORMAN ROBERTS, Passed Assistant Surgeon, United States Public Health Service.

Hydrocyanic acid is potentially about the most dangerous to human life of any of the better-known fumigating agents. Hence the United States Public Health Service has hitherto generally avoided its use; but recently circumstances at New Orleans have combined to make the employment of any other agent impracticable for certain vessels, and a procedure was evolved which at the present writing appears to be effective against rodents and insects, rapid, harmless to ship and cargo, not unduly expensive (considering the total of first cost, labor, and supplies), and when properly used, reasonably safe¹—a combination of good qualities possessed to the same degree by no other fumigant.

In the fumigation of ships at New Orleans two methods are used, in both of which potassium or sodium cyanide is decomposed by sulphuric acid, as expressed by the chemical equation—



By either method 1 ounce of KCN is used for each 100 cubic feet with $1\frac{2}{3}$ ounces (about 1 fluid ounce) of sulphuric acid, and 3 fluid ounces of water. (Proportionately more when required).

The first method (the "crock" or "solid cyanide") is similar to that used by citrus growers, and is used in small accessible compartments, such as living quarters and store rooms. The sulphuric acid is diluted with the whole of the water, either two or three parts by volume (see later) and put into the container (preferably while still hot after the admixture); and the solid cyanide, the proper amount of which for each compartment has been previously weighed out into a bag, is dropped into the dilute acid. The compartment has been prepared previously by closing and where necessary calking or papering all openings except one; through this the operator enters or

¹ It is not reasonable to expect of any agent efficient in the destruction of rats—one of the hardest and wariest of man's animal enemies—that it shall be incapable of taking human life. The proper safeguards against danger from a fumigating gas are system, skill, and vigilance on the part of the fumigators and the ship's officers.

reaches to drop in the cyanide, after which he quickly escapes and this last opening is tightly closed.

This (solid cyanide) method is safe and certain for small and easily accessible inclosures, and on account of its simplicity, etc., is the best for such compartments on shipboard, but it is not trustworthy for unit quantities of cyanide larger than about 3 pounds (sufficient for about 5,000 cubic feet of space). Hence the solid-cyanide method is not safe to use in holds, where the operator must stay a considerable time putting cyanide into a large number of crocks and then escape through the top of the compartment, where the gas soon tends to concentrate.

The second method (the "barrel" or "liquid cyanide") is used in the holds, and is carried out by diluting the acid with part of the water in the barrel, which is then swung down to the lowest accessible point in the hold; the cyanide, previously dissolved in the remainder of the water, is then poured into the barrel from the deck by means of a pitcher and funnel through a long rubber hose. After the cyanide is all in, it is followed after a few seconds or minutes by a strong sodium carbonate solution, which expels part of the dissolved hydrocyanic acid from the waste and reduces the remaining acidity, thus economizing on the expensive cyanide and rendering the waste less poisonous, corrosive, and troublesome.

Apparatus, Materials, and Preparation.

Crocks.—These are of the 1-gallon size and of cheap glazed stoneware, best plain cylindrical in form, and with the height about equal to the diameter. One gallon of crock capacity is sufficient for 10 ounces of cyanide with acid and water, which is usually the quantity used to fumigate 1,000 cubic feet.

Buckets.—Ordinary cheap fiber buckets, of about 3 gallons capacity, are used to carry the crocks around in and to prevent damage if they break.

Bags.—Best made of thin, close muslin, but paper will do. The proper function of the bag is to facilitate the distribution of the cyanide and thereby save valuable time during the fumigation, not (as sometimes recommended) to delay the reaction between the chemicals. If paper is used, it should be torn as the bag is dropped into the acid; otherwise it may remain unpenetrated.

Barrels.—Any strong, water-tight wood barrel will do; 50-gallon oil barrels have been used at New Orleans. It would probably be advantageous to char the inside of the barrel and line it with a small quantity of paraffin, driven as deeply as possible into the wood by heat; but untreated barrels, originally in good condition, appear to last for several fumigations without marked deterioration if not

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subjected to the action of unduly strong acid, as by mixing the acid and water in the barrels without sufficient stirring. A 50-gallon barrel will serve for the decomposition of about 80 pounds of cyanide (125,000 cubic feet of space), but it is better to use much smaller charges (20 to 30 pounds—30,000 to 45,000 cubic feet of space) and more barrels, on account both of the difficulty of handling barrels full of a troublesome liquid and of the faulty distribution of the gas when given off from a single source into a large hold complicated by cargo barricades and decks.

Piping.—Light garden hose or single-ply rubber tubing of about the same diameter is provided in pieces long enough to reach from 2 or 3 feet above the hatch combing to about a foot below the top of the barrel. At this point it is slipped and tied securely over an L-shaped piece of lead pipe which extends vertically to the bottom of the barrel and horizontally halfway across, opening either at the end or by several small holes along the side.

Cyanide.—What is properly known as 98-99 per cent potassium cyanide is the standard and meets all of the usual requirements. High-grade sodium cyanide (the so-called 130 per cent) is a substitute at least equal in all respects and better in some. As, in equal weights, potassium cyanide contains about one-fourth less cyanogen than sodium cyanide, one-fourth less sodium cyanide should be used if substituted for potassium cyanide. The salt comes in lumps, which may be used whole or slightly broken in the crocks, but should be well powdered (best in a mill) immediately before making up into solution for the barrel, because otherwise solution is slow and difficult.¹

Cyanide solution (for use in the barrel).—Not much more than enough water should be used to dissolve the cyanide completely. Potassium cyanide dissolves in about 2 parts of water at ordinary temperatures; of sodium cyanide, about 82 parts dissolve in 100 of water. The solutions are sufficiently stable to keep a few hours if necessary; but for several reasons should not be kept long, unnecessarily.

Sulphuric acid.—Ordinarily, the commercial oil of vitriol, of about "66° B" strength, coming in carboys, contains no deleterious amount of impurities. In diluting it, the water is *first* poured into the vessel and the acid is poured into the water in a fine stream, the

¹ The most injurious impurity found in the cyanide is chloride, usually common salt. This destroys more or less (up to over 90 per cent) of the hydrocyanic acid as fast as formed by hydrolyzing it into the inert and corrosive formic acid. Unfortunately this impurity is sometimes hard to avoid, inasmuch as there are at present on the market large quantities of so-called "potassium cyanide," "cyanide-carbonate-chloride mixture," etc., most of which consist essentially of sodium cyanide with the cyanogen content reduced to the equivalent of about 99 per cent potassium cyanide by the addition of supposedly inert compounds, unfortunately in many instances sodium chloride.

water being kept constantly circulating to prevent accumulation of strong acid under the water, which may char the barrel (if of wood or fiber), or violently boil and scatter the acid. The acid should, if possible, be diluted just before using, in order that the heat evolved may not be lost, but be utilized as much as possible in expelling the hydrocyanic acid from the liquid.

Water.—Salt water will, of course, not do; neither will certain (untreated) river waters, such as that of the Mississippi at New Orleans, which latter sometimes produces a slimy precipitate with the cyanide, choking the tubing. But most ordinarily pure waters are suitable; in any given case a little simple experimentation will show.

Proportions.—The best proportions for potassium cyanide are considered to be about 1:1:3, and for sodium cyanide 1: $1\frac{1}{2}$:2. This means, for instance, 1 *pound* (or kilogram) of potassium cyanide to each 1 *pint* (or liter) of concentrated sulphuric acid, with 3 *pints* (or liters) of water.¹

These proportions can be adhered to in the crock method, but in the barrel method more water may be necessary to dissolve the cyanide and dilute the acid separately.

Sodium carbonate solution.—A nearly or quite saturated solution of common washing-soda crystals. About half the weight of the cyanide may be used. To neutralize the residual acid completely, about one and one-half times the weight of the original concentrated acid is needed.

Advantages of Cyanide Fumigation.

Hydrocyanic acid vapor when mixed with air in the proportion of about 0.4 per cent rapidly kills rodents, insects, and many (microscopic) plants, including some bacteria. It is said to be particularly efficacious against fleas; bedbugs and croton bugs require larger quantities. For use against plague it has the great advantage that it penetrates most articles of cargo without damaging them, killing the vermin, no matter how deeply hidden. In rapidity of action on rats it is in the same class with carbon monoxide and far superior to any other commonly used raticide, probably because both are absorbed rapidly and in large quantities by the hemoglobin and carried to the nerve centers, whereas the other commonly used gaseous narcotic poisons are absorbed relatively slowly and in small quantities by the blood plasma.

¹ These proportions have been determined by calculation and experiment as those which most thoroughly expel the acid from the mixture, while at the same time guarding against the premature solidification of the waste by crystallization of the acid sulphate, which stops the reaction if it takes place before the cyanide is completely decomposed.

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Hydrocyanic acid is slightly lighter than air; hence in its use care must be taken to prevent its escape from or undue concentration in the upper part of the space, leaving in the lower part too low a concentration to kill.

Remedies for this condition are: To allow time for the diffusion; to obstruct and scatter the rising column of gas by placing the generator under a low projection, or loosely covering with paper; to blow from an electric fan into or across the mouth of the generator; to mix a quantity of sodium carbonate (low in chlorides) with the cyanide, thus increasing the density of the gas.

As compared with sulphur dioxide, hydrocyanic acid has the advantages that, first, its use requires no fire; second, the gas penetrates rapidly and without damaging any ordinary article of cargo.

As compared with carbon monoxide, hydrocyanic acid kills fleas and other insects and requires for its production much less apparatus and no fire.

PLAQUE-ERADICATIVE WORK.

LOUISIANA—NEW ORLEANS.

The following report of plague-eradicative work in New Orleans for the week ended November 28, 1914, has been received from Surg. Corput, of the United States Public Health Service, in temporary charge of the work:

OUTGOING QUARANTINE.	
Vessels fumigated with sulphur.....	24
Vessels fumigated with carbon monoxide.....	10
Vessels fumigated with hydrocyanic gas.....	2
Pounds of sulphur used.....	6,406
Coke consumed in carbon-monoxide fumigation (pounds).....	16,900
Pounds of potassium cyanide used in hydrocyanic-gas fumigation.....	170
Pounds of sodium carbonate used in hydrocyanic-gas fumigation.....	170
Pounds of sulphuric acid used in hydrocyanic-gas fumigation.....	280
Clean bills of health issued.....	24
Foul bills of health issued.....	10
OVERLAND FREIGHT INSPECTION.	
Cars inspected, found in good order, permitted to load.....	986
Cars ordered repaired before loading.....	1,381
Cars condemned.....	3
Total cars inspected.....	2,370
DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED WEEK ENDED NOV. 28.	
Alabama.....	88
Arkansas.....	5
California.....	7
Carolina, North.....	1
Carolina, South.....	4
Colorado.....	15
Florida.....	31
Georgia.....	22
Illinois.....	170
Indiana.....	17
Iowa.....	6
Kansas.....	1
Kentucky.....	21
Louisiana.....	834
Massachusetts.....	4
Michigan.....	11
Minnesota.....	4
Mississippi.....	310
Missouri.....	59
Montana.....	1
New Mexico.....	1
New York.....	15
Ohio.....	42
Oklahoma.....	2
Pennsylvania.....	19
Tennessee.....	126
Texas.....	172
Virginia.....	4
Wisconsin.....	11
Canada.....	9

FIELD OPERATIONS.		Total buildings rat proofed.....	411
Rats trapped.....	7,643	Buildings rat proofed to date.....	4,586
Premises fumigated.....	0	Abatements.....	412
Premises disinfected.....	143	Abatements to date.....	14,963
Premises inspected.....	8,741	LABORATORY OPERATIONS.	
Poisons placed.....	35,700	Rodents examined.....	7,478
Notices served.....	1,667	Mus norvegicus.....	3,575
BUILDINGS RAT PROOFED.		Mus rattus.....	85
By elevation.....	64	Mus alexandrinus.....	172
By marginal concrete walls.....	94	Mus musculus.....	3,816
By concrete floor and walls.....	174	Unclassified, putrid.....	212
By minor repairs.....	79	Total rodents received at laboratory.....	7,669
Square yards of concrete laid.....	13,898	Number of suspicious rats.....	46
		Plague rats confirmed.....	9

Rodent cases.

Case No.	Address.	Captured.	Diagnosis confirmed.	Treatment of premises.
197	3911 Iberville Street. Taken as a result of summary destruction of rat harborage.	Nov. 21	Nov. 22	See case 196.
198				Intensive trapping.
199				See case 197.
200	Stuyvesant docks.....	Nov. 24	Nov. 24	Intensive trapping.
201	3911 Iberville Street.....	Nov. 25	Nov. 25	Intensive trapping.
202	Mandeville and Florida Walk (city garbage dump).	Nov. 20	Nov. 27	Intensive trapping.
203	826 North Claiborne.....	Nov. 16	Nov. 28	Rat proofing. Intensive trapping.
204	Westwego garbage dump.....	Nov. 21	Nov. 28	Intensive trapping.
205	1005 Poeyfarre Street.....	Nov. 28	Nov. 28	Summary destruction of rat harborage. Intensive trapping. Rat proofing initiated.

¹ Chronic plague.

Total number of rodents captured to Nov. 28..... 167,277
 Total number of rodents examined to Nov. 28..... 143,907

Rodent cases to Nov. 28, by species:

Mus rattus.....	10
Mus alexandrinus.....	3
Mus musculus.....	1
Mus norvegicus.....	191

Total rodent cases to Nov. 28..... 205

HAWAII.

The following reports of plague-eradicative work in Hawaii have been received from Surg. Trotter, of the United States Public Health Service:

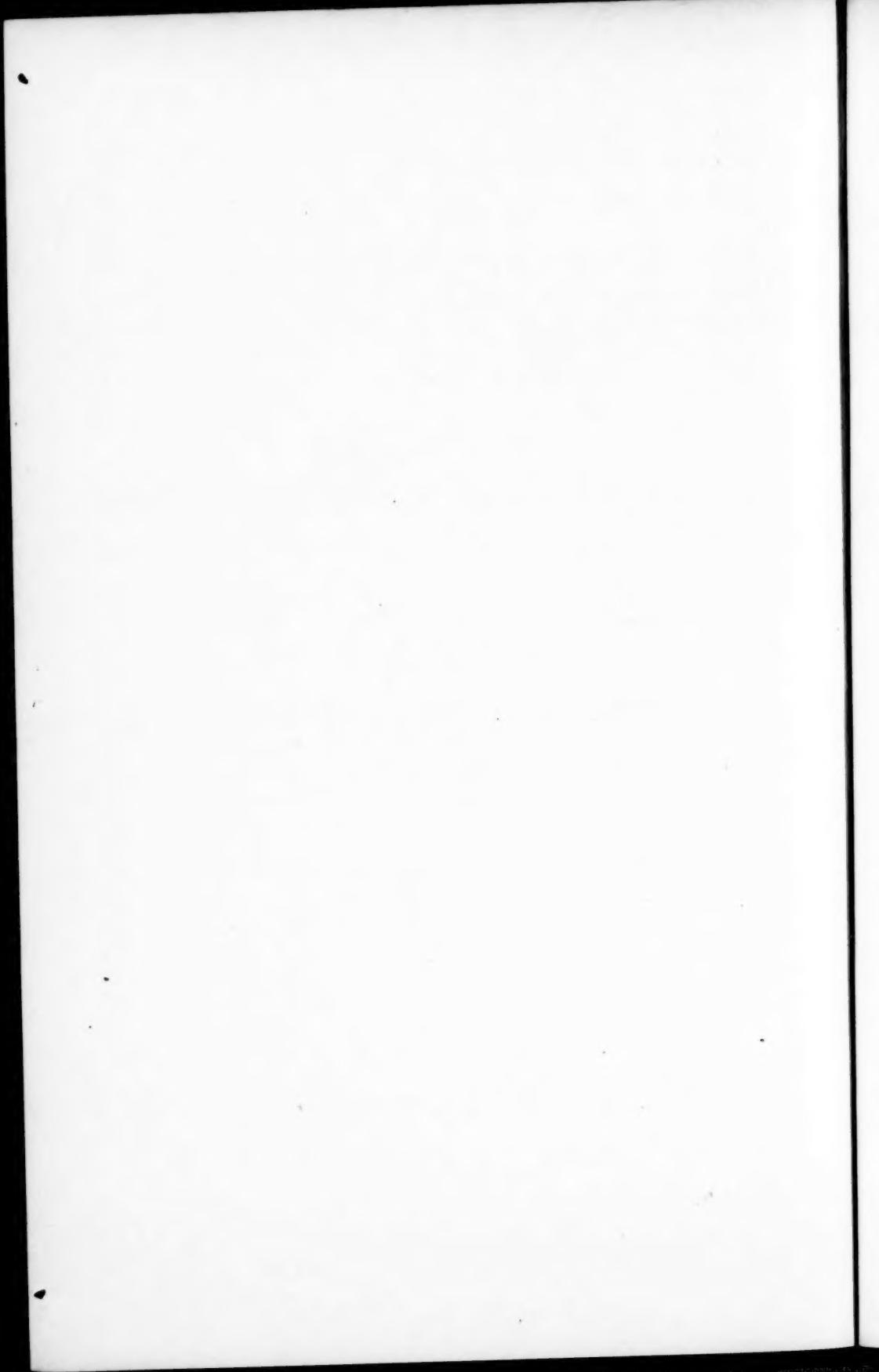
Honolulu.**WEEK ENDED NOV. 14, 1914.**

Total rats and mongooses taken.....	488	Average number of traps set daily.....	1,085
Rats trapped.....	482	Cost per rat destroyed..... cents..	17 $\frac{1}{2}$
Mongoose trapped.....	6	Last case rat plague Aiea, 9 miles from Honolulu, Apr. 12, 1910.	
Examined microscopically.....	416	Lest case human plague Honolulu, July 12, 1910.	
Showing plague infection.....	0	Last case rat plague Kalopa stable, Paauhau, Hawaii, Aug. 29, 1914.	
Classification of rats trapped:		Last case human plague Paauhau Landing, Hawaii, Aug. 17, 1914.	
Mus alexandrinus.....	226		
Mus musculus.....	166		
Mus norvegicus.....	76		
Mus rattus.....	14		

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Hilo.**WEEK ENDED Nov. 7, 1914.**

Rats and mongoose taken.....	2,080	Classification of rats trapped and found dead:
Rats trapped.....	2,032	Mus norvegicus..... 443
Rats found dead.....	3	Mus alexandrinus..... 247
Mongoose taken.....	45	Mus ratus..... 564
Rats and mongoose examined macroscopically.....	2,080	Mus musculus..... 781
Rats and mongoose plague-infected.....	0	Last case of rat plague, Paauhau Sugar Co., August 29, 1914.
		Last case of human plague, Paauhau Sugar Co., August 16, 1914.



PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Nov. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.....	2	2	Manchester, N. H.....	1	1
Chicago, Ill.....	4		New York, N. Y.....	3	3
Cleveland, Ohio.....	1		Philadelphia, Pa.....	1	2
Detroit, Mich.....	1		Reading, Pa.....	1	
Los Angeles, Cal.....	1		St. Louis, Mo.....	2	1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 3332.

ERYSIPelas.

City Reports for Week Ended Nov. 21, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....		1	New York, N. Y.....		3
Buffalo, N. Y.....	2	1	Pasadena, Cal.....	1	
Chicago, Ill.....	13	2	Philadelphia, Pa.....	9	1
Cincinnati, Ohio.....	4		Pittsburgh, Pa.....	9	
Cleveland, Ohio.....	4		Portland, Oreg.....	2	
Erie, Pa.....	1		Reading, Pa.....		1
Harrisburg, Pa.....	2		St. Louis, Mo.....	6	
Hartford, Conn.....	3		San Francisco, Cal.....	3	1
Milwaukee, Wis.....	2		Schenectady, N. Y.....	2	
Newark, N. J.....		1	Springfield, Ill.....	1	

LEPROSY.

California—San Diego.

The State Board of Health of California reported that on November 24, 1914, a case of leprosy had been notified at San Diego, Cal. The case occurred in a Mexican woman who came to the United States from Nogales, Mexico, in September, 1910, since which time she has lived in Los Angeles, Wilmington, and San Diego, Cal. The patient has been isolated in the San Diego County Hospital.

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 3332.

PELLAGRA.**City Reports for Week Ended Nov. 21, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.	1	1	Mobile, Ala.	2	1
Charleston, S. C.	1	1	New Orleans, La.	2	1
Chicago, Ill.	1	1	Newton, Mass.	1	1
Lynchburg, Va.	1	1	Rome, Ga.	1	1

PNEUMONIA.**City Reports for Week Ended Nov. 21, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y.	2		Los Angeles, Cal.	9	4
Binghamton, N. Y.	2	1	Manchester, N. H.	2	2
Braddock, Pa.	2		New Castle, Pa.	1	
Chicago, Ill.	106	57	Newport, Ky.	1	1
Cleveland, Ohio	13	16	Philadelphia, Pa.	19	74
Duluth, Minn.	1	1	Pittsburgh, Pa.	15	21
Galesburg, Ill.	1	1	Saginaw, Mich.	1	3
Grand Rapids, Mich.	2	4	San Diego, Cal.	1	1
Kansas City, Kans.	1		Schenectady, N. Y.	6	7
La Crosse, Wis.	1		South Bethlehem, Pa.	3	
Lancaster, Pa.	1		Steelton, Pa.	1	

POLIOMYELITIS (INFANTILE PARALYSIS).**City Reports for Week Ended Nov. 21, 1914.**

During the week ended November 21, 1914, poliomyelitis was notified by cities as follows: Boston, Mass., 1 case; Buffalo, N. Y., 1 case; Chicago, Ill., 2 cases; New York, N. Y., 4 cases; Philadelphia, Pa., 1 case.

RABIES.**California—Berkeley—Rabies in Animals.**

During the week ended November 21, 1914, a case of rabies in a dog was notified at Berkeley, Cal.

City Reports for Week Ended Nov. 21, 1914.

During the week ended November 21, 1914, rabies was notified by cities as follows: Chicago, Ill., 1 case; Cleveland, Ohio, 1 case; New York, N. Y., 1 death.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 3332.

SMALLPOX.**Louisiana—Lake Arthur.**

Asst. Surg. Sweeney reported by telegraph December 5, 1914, that since his report dated November 21, 1914, 8 additional cases of smallpox had been notified at Lake Arthur, La.

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SMALLPOX—Continued.**City Reports for Week Ended Nov. 21, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Butte, Mont.	1		Milwaukee, Wis.	24	
Chicago, Ill.	1		Muncie, Ind.	2	
Cincinnati, Ohio.	1		Nashville, Tenn.	2	
Cleveland, Ohio.	2		Newport, Ky.	1	
Detroit, Mich.	11		Portland, Oreg.	3	
Duluth, Minn.	2		St. Louis, Mo.	5	
Knoxville, Tenn.	6		San Diego, Cal.	1	
La Crosse, Wis.	1		Superior, Wis.	2	
Little Rock, Ark.	1				

TETANUS.**City Reports for Week Ended Nov. 21, 1914.**

During the week ended November 21, 1914, tetanus was notified by cities as follows: Chicago, Ill., 1 case, 1 death; New York, N. Y., 2 cases; Philadelphia, Pa., 1 case, 1 death; St. Louis, Mo., 1 case, 2 deaths.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 3332.

TYPHOID FEVER.**City Reports for Week Ended Nov. 21, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.	1		Nashville, Tenn.	14	2
Ann Arbor, Mich.	3		Newark, N. J.	2	
Baltimore, Md.	29	3	New Castle, Pa.	1	
Beaver Falls, Pa.	1		New Bedford, Mass.	2	
Boston, Mass.	17	2	Newburyport, Mass.	1	
Buffalo, N. Y.	7	3	New London, Conn.	1	
Cambridge, Mass.	2		New Orleans, La.	21	1
Camden, N. J.	2		Newton, Mass.	1	
Charleston, S. C.	3		New York, N. Y.	40	7
Chicago, Ill.	48	7	Norfolk, Va.	4	
Chicopee, Mass.	3		Norristown, Pa.	3	
Cincinnati, Ohio.	2		North Adams, Mass.	2	2
Cleveland, Ohio.	9		Orange, N. J.	1	
Cumberland, Md.	1		Pawtucket, R. I.		1
Detroit, Mich.	12	1	Philadelphia, Pa.	13	2
Erie, Pa.	1		Pittsburgh, Pa.	9	
Evansville, Ind.	1		Plainfield, N. J.	1	
Fitchburg, Mass.		1	Portland, Oreg.	2	
Galveston, Tex.	3		Providence, R. I.	11	2
Grand Rapids, Mich.	12		Reading, Pa.	1	
Harrisburg, Pa.	2	2	Richmond, Va.	2	
Hartford, Conn.	21		Roanoke, Va.	2	
Haverhill, Mass.	1		Rockland, Me.	1	
Kansas City, Kans.	1		Rome, Ga.	1	
Kokomo, Ind.	1		Sacramento, Cal.	1	
Jersey City, N. J.	3		St. Louis, Mo.	12	
Johnstown, Pa.		3	San Francisco, Cal.	2	2
La Crosse, Wis.	1		San Juan, P. R.	1	1
Lexington, Ky.	4		Saratoga Springs, N. Y.	1	
Little Rock, Ark.	9		Schenectady, N. Y.	2	1
Los Angeles, Cal.	2	1	South Bethlehem, Pa.	1	
Lynchburg, Va.		1	Springfield, Ill.	1	
Manchester, N. H.	1		Springfield, Mass.	2	1
Melrose, Mass.	2		Superior, Wis.		1
Milwaukee, Wis.	4		Toledo, Ohio.	4	1
Mobile, Ala.	1	1	Trenton, N. J.	1	
Moline, Ill.	1		Wheeling, W. Va.		1
Nanticoke, Pa.	1		Wilkes-Barre, Pa.	1	1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Nov. 21, 1914.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diphthe- ria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	579,590	166	44	5	2	—	10	1	20	15
Boston, Mass.	733,802	204	104	7	98	2	52	1	35	16
Chicago, Ill.	2,393,325	571	261	12	14	—	66	—	167	71
Cleveland, Ohio.	639,431	140	97	4	3	—	14	—	33	7
Detroit, Mich.	537,650	134	63	4	—	—	28	1	24	11
New York, N. Y.	5,333,537	1,244	332	22	185	2	164	5	400	155
Philadelphia, Pa.	1,657,810	468	70	9	31	—	25	1	84	42
Pittsburgh, Pa.	564,873	159	58	1	101	1	108	4	28	11
St. Louis, Mo.	734,667	229	163	17	3	—	47	2	30	26
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	454,112	135	28	3	2	—	26	1	—	13
Cincinnati, Ohio.	402,175	119	30	2	1	—	5	—	23	17
Los Angeles, Cal.	438,914	111	25	1	6	—	7	—	45	14
Milwaukee, Wis.	417,054	88	50	7	5	—	16	1	14	12
Newark, N. J.	389,109	74	37	2	2	—	13	1	42	7
New Orleans, La.	361,221	135	44	2	1	—	2	—	35	23
San Francisco, Cal.	448,502	132	19	—	138	4	1	—	36	16
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.	204,567	—	18	2	—	—	13	—	5	7
Jersey City, N. J.	203,321	67	41	1	2	—	11	1	16	5
Portland, Oreg.	260,601	44	15	—	1	—	5	—	3	5
Providence, R. I.	245,090	63	10	2	3	—	13	1	1	5
Seattle, Wash.	313,029	63	1	1	1	—	2	—	15	7
From 100,000 to 200,000 inhabitants:										
Cambridge, Mass.	110,357	33	6	—	7	—	6	—	7	3
Camden, N. J.	102,465	—	9	—	15	—	6	—	6	—
Grand Rapids, Mich.	123,227	38	5	—	—	—	11	—	3	2
Hartford, Conn.	107,038	—	9	1	1	—	3	—	3	1
Lowell, Mass.	111,004	34	4	1	1	—	2	—	5	1
Nashville, Tenn.	114,899	42	7	1	—	—	7	—	4	1
New Bedford, Mass.	111,239	29	2	—	4	—	10	2	7	—
Reading, Pa.	103,361	30	8	3	—	—	3	—	1	2
Richmond, Va.	131,917	52	8	—	—	—	4	—	7	7
Springfield, Mass.	109,375	37	4	—	1	—	2	—	2	—
Toledo, Ohio.	181,123	46	13	—	24	—	2	—	9	6
Trenton, N. J.	106,831	42	11	1	—	—	5	—	5	3
Worcester, Mass.	157,732	39	8	1	2	—	1	—	9	3
From 50,000 to 100,000 inhabitants:										
Altoona, Pa.	56,573	12	4	1	—	—	—	—	1	—
Atlantic City, N. J.	53,952	10	—	—	2	—	2	—	2	—
Bayonne, N. J.	65,271	12	10	—	—	—	2	—	—	—
Berkeley, Cal.	52,105	9	—	—	2	—	—	—	—	1
Binghampton, N. Y.	52,191	18	10	—	—	—	1	—	—	1
Brockton, Mass.	64,043	13	5	—	—	—	1	—	2	—
Charleston, S. C.	60,121	43	7	1	—	—	1	—	1	4
Duluth, Minn.	89,331	—	4	—	2	—	—	—	1	2
Erie, Pa.	72,401	—	2	—	—	—	4	—	2	—
Evansville, Ind.	71,284	18	9	1	17	—	1	—	—	1
Harrisburg, Pa.	69,493	18	6	—	—	—	—	—	—	—
Johnstown, Pa.	64,642	23	4	3	—	—	5	—	1	—
Kansas City, Kans.	94,271	—	9	—	1	—	1	—	2	—
Little Rock, Ark.	53,811	27	9	—	1	—	1	—	1	—
Lynn, Mass.	98,207	22	2	—	1	—	5	—	2	5
Manchester, N. H.	75,635	25	—	—	—	—	—	—	—	—
Mobile, Ala.	55,513	25	2	—	—	—	1	—	1	4
New Britain, Conn.	50,612	—	3	—	1	—	—	—	—	1
Norfolk, Va.	86,540	—	6	—	—	—	3	—	—	1
Passaic, N. J.	66,276	21	6	1	—	—	3	—	—	1
Pawtucket, R. I.	56,991	14	—	—	—	—	1	—	—	1
Saginaw, Mich.	53,988	—	2	—	—	—	3	1	2	—
Schenectady, N. Y.	90,503	26	9	1	23	—	3	—	1	—
South Bend, Ind.	65,114	10	1	—	—	—	2	—	1	2
Springfield, Ill.	57,972	17	7	1	—	—	4	—	1	1
Springfield, Ohio.	50,058	8	4	—	—	—	—	—	2	—
Wilkes-Barre, Pa.	73,660	14	11	—	1	—	3	—	4	—
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	26,339	6	—	—	15	—	1	—	2	2
Auburn, N. Y.	36,569	10	2	—	—	—	—	—	—	2
Aurora, Ill.	33,022	11	4	—	—	—	—	—	—	—
Austin, Tex.	33,218	8	11	—	—	—	4	—	—	—
Butte, Mont.	41,781	15	2	—	—	—	—	—	1	7

16 from country.

December 11, 1914

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Nov. 21, 1914—Continued.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diphthe- ria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Con.										
Chelsea, Mass.	32,452	5	—	—	—	—	—	—	2	—
Chicopee, Mass.	28,057	7	8	—	—	—	—	—	2	—
Danville, Ill.	30,847	14	2	—	—	—	1	—	—	—
East Orange, N. J.	39,832	—	1	—	—	—	5	—	1	1
Elgin, Ill.	27,485	6	4	1	—	—	—	—	—	—
Everett, Mass.	37,381	8	1	—	16	—	—	—	—	1
Everett, Wash.	32,048	9	—	—	—	—	—	—	—	2
Fitchburg, Mass.	40,507	7	1	—	—	—	—	—	—	—
Galveston, Tex.	40,289	18	1	1	—	—	—	—	—	2
Haverhill, Mass.	47,071	7	2	—	3	—	6	—	3	—
Kalamazoo, Mich.	45,842	13	—	1	—	—	—	—	—	—
Knoxville, Tenn.	37,924	—	1	—	—	—	—	—	—	—
La Crosse, Wis.	31,367	2	1	—	—	—	—	—	—	—
Lancaster, Pa.	49,685	—	6	—	—	—	1	—	—	—
Lexington, Ky.	38,819	20	1	—	—	—	2	—	—	—
Lynchburg, Va.	31,830	9	3	—	—	—	—	—	—	2
Malden, Mass.	48,979	8	10	1	—	—	2	—	2	—
Medford, Mass.	25,240	6	3	—	1	—	1	—	4	—
Moline, Ill.	26,402	7	1	—	—	—	1	—	—	—
New Castle, Pa.	39,569	—	6	—	—	—	3	—	—	—
Newport, Ky.	31,517	6	4	—	—	—	9	—	—	—
Newport, R. I.	29,154	13	—	—	—	—	2	—	—	—
Newton, Mass.	42,455	5	1	—	—	—	—	—	1	—
Niagara Falls, N. Y.	35,127	10	2	1	—	—	—	—	—	—
Norristown, Pa.	30,265	6	2	—	—	—	—	—	—	—
Orange, N. J.	31,968	7	—	—	—	—	7	—	4	—
Pasadena, Cal.	40,880	13	—	—	—	—	—	—	4	2
Portsmouth, Va.	37,569	5	2	—	—	—	—	—	—	—
Racine, Wis.	44,528	12	—	—	—	—	1	—	—	—
Roanoke, Va.	40,574	15	11	1	—	—	3	—	1	3
Sacramento, Cal.	62,717	17	5	1	14	—	2	—	—	5
San Diego, Cal.	48,900	—	1	—	—	—	1	—	1	1
South Omaha, Nebr.	26,368	6	—	—	—	—	—	—	—	—
Superior, Wis.	44,344	12	4	—	—	—	3	—	—	1
Taunton, Mass.	35,631	9	—	—	—	—	3	—	—	1
Waltham, Mass.	29,688	11	1	—	—	—	—	—	—	2
West Hoboken, N. J.	40,647	—	3	—	4	—	1	—	5	—
Wheeling, W. Va.	42,817	14	8	1	—	—	1	—	—	1
Wilmington, N. C.	27,781	10	1	—	—	—	—	—	—	1
York, Pa.	49,430	—	1	—	—	—	—	—	3	—
Zanesville, Ohio.	29,949	—	1	—	—	—	1	—	—	—
Less than 25,000 inhabitants:										
Ann Arbor, Mich.	14,948	4	6	—	—	—	4	—	5	—
Braddock, Pa.	20,935	—	—	—	—	—	3	—	6	—
Cairo, Ill.	15,392	5	1	—	—	—	2	—	—	—
Cambridge, Ohio.	12,640	5	—	—	—	—	1	—	2	2
Clinton, Mass.	13,075	3	—	—	—	—	—	—	—	—
Coffeyville, Kans.	15,982	—	2	—	—	—	—	—	—	—
Cumberland, Md.	23,846	11	2	—	—	—	5	—	7	1
Florence, S. C.	3	—	—	—	—	—	1	—	—	—
Galesburg, Ill.	23,570	4	—	—	—	—	—	—	—	—
Grand Haven, Mich.	—	2	—	—	—	—	—	—	—	—
Harrison, N. J.	16,160	—	1	—	—	—	1	—	—	—
Kearny, N. J.	21,967	4	2	—	1	—	4	1	2	—
Ketchikan, Alaska.	—	1	—	—	—	—	—	—	—	—
Key West, Fla.	21,150	5	—	—	—	—	—	—	—	1
Kokomo, Ind.	19,694	7	2	1	—	—	—	—	—	1
Marinette, Wis.	14,610	2	3	—	—	—	—	—	—	—
Massillon, Ohio.	14,912	5	3	—	2	—	—	—	2	1
Melrose, Mass.	16,887	4	3	—	3	—	—	—	—	—
Montclair, N. J.	24,782	4	—	—	—	—	—	—	—	—
Morristown, N. J.	13,033	1	—	—	—	—	1	—	—	—
Muncie, Ind.	24,969	6	3	2	—	—	3	—	—	—
Muscatine, Iowa.	17,074	2	—	—	—	—	—	—	—	—
Nanticoke, Pa.	21,756	4	3	1	—	—	—	—	—	—
Newburyport, Mass.	16,147	4	—	—	—	—	—	—	—	—
New London, Conn.	20,557	7	2	—	—	—	3	—	—	—
North Adams, Mass.	22,019	8	—	—	2	—	—	—	—	—
Northampton, Mass.	19,766	10	—	—	—	—	1	—	—	—

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Nov. 21, 1914—Continued.

IN INSULAR POSSESSIONS.

PHILIPPINE ISLANDS.

Cholera in Manila.

In reporting under date of October 22, 1914, Asst. Surg. Duffy, of the United States Public Health Service, acting chief quarantine officer, states:

The cholera situation in Manila has become very satisfactory, only about 1 case per day occurring since October 8. The total number of cases to date in Manila is 475, with 216 deaths.

Cholera in the Provinces.

The epidemic of cholera in the provincial sections also shows improvement. Forty towns are, however, still infected.

A table showing data with regard to the occurrence of cholera in the provinces is submitted herewith. The figures are compiled by the bureau of health. All the towns named are on the island of Luzon with the exception of Capiz and Iloilo, which are on the island of Panay. No cases have occurred in Iloilo since July 20 and none in Capiz since September 27. The transmission seems to have been by land and railroad. No transmission by interisland vessels has occurred.

Cholera Carriers.

With the general subsidence of the cholera epidemic cholera carriers became likewise fewer.

The office has now made, in the present series, 1,700 examinations of stools of persons employed on river and canal craft, such as lighters, scows, launches, etc. By hundreds examined the results were as follows in this series, which covers the period from August 19 to October 19, 1914, two complete months:

Order in series.	Cholera carriers found.	Order in series.	Cholera carriers found.
1 to 100.....	4	1,001 to 1,100.....	0
101 to 200.....	2	1,101 to 1,200.....	1
201 to 300.....	3	1,201 to 1,300.....	0
301 to 400.....	2	1,301 to 1,400.....	0
401 to 500.....	0	1,401 to 1,500.....	0
501 to 600.....	0	1,501 to 1,600.....	0
601 to 700.....	1	1,601 to 1,700.....	0
701 to 800.....	2		
801 to 900.....	4	Total.....	19
901 to 1,000.....	0		

It will be noted that the first and ninth 100 showed 4 per cent of carriers, and that the first 300 resulted in 3 per cent of carriers; the first 1,000, a percentage of 2.1; and the last series less than 1 per cent. As the number of carriers decreased, the number of cases and deaths from cholera reported also diminished. This work will be discontinued in a few days, as no further carriers are being found.

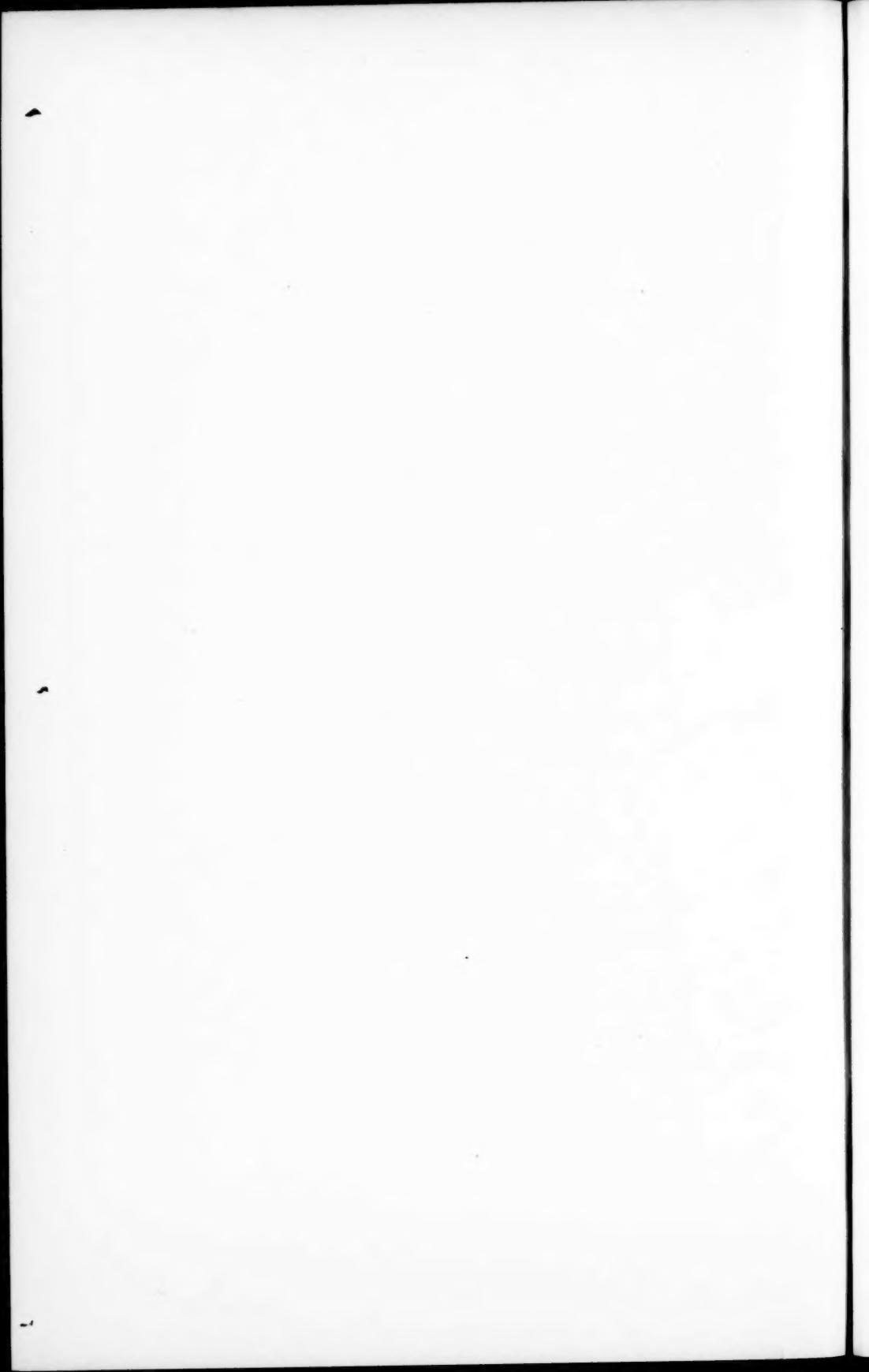
Cholera in the Provinces of the Philippine Islands from July 2 to Oct. 5, 1914, inclusive.

Province and town.	Date of first case.	Date of last case.	Cases.	Deaths.
Rizal:				
Malabon.....	July 2	Oct. 1	30	14
Pateros.....	July 7	Aug. 3	2	0
S. P. Macati.....	July 12	July 20	8	2
Pasay.....	July 16	Oct. 3	15	1
Pasig.....	July 17	July 19	4	3
Laspinas.....	July 21	July 21	1	0
Paranaque.....	do.....	Sept. 24	2	2
Navotas.....	July 25	Oct. 5	38	34
Caloocan.....	Aug. 3	Sept. 11	10	5
Jalajala.....	Aug. 16	Aug. 25	16	13
			126	74
Bulacan:				
Paombong.....	July 21	Oct. 5	25	24
Calumpit.....	do.....	Aug. 24	12	6
Baliwag.....	July 20	Oct. 2	5	4
Hagonoy.....	July 23	Oct. 5	158	97
Meycauayan.....	July 25	July 25	5	3
Polo.....	Aug. 3	Aug. 31	10	9
Pulilan.....	Sept. 21	Sept. 21	1	1
Obando.....	Aug. 7	Oct. 3	15	13
Malolos.....	Aug. 11	Sept. 27	52	41
Bulacan.....	Aug. 17	do.....	22	17
Bocage.....	Aug. 23	Aug. 22	2	1
Quigua.....	Aug. 31	Sept. 4	3	2
			310	218
Cavite:				
Cavite.....	July 9	Sept. 9	8	7
Imus.....	Aug. 28	Aug. 28	1	1
Rosario.....	Sept. 11	Sept. 27	12	12
Kawit.....	Sept. 22	Oct. 4	5	3
Bacoor.....	Oct. 5	Oct. 5	1	0
Carmona.....	Sept. 22	Oct. 4	7	7
Noveleta.....	Oct. 2	Oct. 5	4	2
			38	32
Iloilo:				
Iloilo.....	July 20	July 20	2	0
Tayabas:				
Lubban.....	Aug. 3	Aug. 3	2	0
Pampanga:				
Minalin.....	Aug. 6	Aug. 6	1	1
Masantol.....	Aug. 7	Oct. 4	36	17
Macabebe.....	Aug. 8	Oct. 2	10	4
Apalit.....	Aug. 10	Aug. 10	1	1
			48	23
Bataan:				
Dinalupihan.....	Oct. 4	Oct. 4	1	1
Orani.....	Aug. 7	Aug. 7	1	1
			2	2
Laguna:				
Binang.....	Sept. 23	Oct. 2	25	19
Santa Rosa.....	Sept. 24	do.....	8	5
Calamba.....	Oct. 1	Oct. 1	1	1
S. P. Tunasan.....	Oct. 2	Oct. 2	1	1
			35	26

December 11, 1914

**Cholera in the Provinces of the Philippine Islands from July 2 to Oct. 5, 1914,
inclusive—Continued.**

Province and town.	Date of first case.	Date of last case.	Cases.	Deaths.
Pangasinan:				
Binalonan.....	Aug. 23	Aug. 23	4	3
Dagupan.....	Sept. 11	Oct. 3	26	17
Mangaldan.....	Sept. 25	Oct. 4	3	3
San Fabian.....	do.....	Oct. 5	10	6
San Jacinto.....	do.....	Sept. 25	1	1
Manaoag.....	Oct. 1	Oct. 4	2	1
			46	30
Union:				
S. Fernando.....	Aug. 29	Oct. 3	77	60
Bawang.....	Sept. 10	Oct. 5	50	34
Nangilian.....	do.....	Oct. 4	14	22
San Juan.....	Sept. 2	do.....	41	27
Bacnotan.....	Sept. 30	do.....	27	25
Agno.....	Sept. 14	Oct. 5	53	33
Santo Tomas.....	do.....	do.....	74	60
Tubao.....	Sept. 16	do.....	13	11
Aringay.....	Sept. 20	do.....	70	45
Bangar.....	Sept. 22	do.....	33	18
Caba.....	Sept. 18	do.....	22	17
Luna.....	Sept. 19	do.....	11	12
Rosario.....	Sept. 18	Oct. 4	9	5
Balacan.....	Oct. 1	Oct. 5	3	1
			407	370
Capiz:				
Capiz.....	Sept. 11	Sept. 27	5	5
Tabuc.....	Sept. 20	Sept. 20	1	1
			6	6
Amburayan:				
San Gabriel.....	Sept. 16	Sept. 19	5	3
Cagayan:				
Apandi.....	Sept. 27	Oct. 4	3	2
Ilocos Sur:				
Caoayan.....	Oct. 2	Oct. 2	1	1
Santa.....	Oct. 1	Oct. 5	7	5
			8	6
Mountain:				
Tagudin.....	Sept. 23	Sept. 25	3	4
Total.....			1,131	967



FOREIGN REPORTS.

CHINA.

Plague-Infected Rat—Hongkong.

During the week ended October 17, 1914, 1,745 rats were examined at Hongkong for plague infection. One plague-infected rat was found.

Quarantine Against Hongkong Suspended.

According to Government notification of October 16, 1914, quarantine against Hongkong on account of plague has been suspended by the governments of Orissa, Burma, and Chittagong, British India, and the government of the Dutch East Indies.

Plague—Plague-Infected Rats—Shanghai.

During the week ended October 31, 1914, 4 deaths from plague were notified at Shanghai. During the same period, 229 rats were examined. Six plague-infected rats were found.

CUBA.

Communicable Diseases—Habana.

Communicable diseases were notified in Habana for the 10 days ended November 20, 1914, as follows:

Diseases.	New cases.	Deaths.	Remaining under treatment.	Diseases.	New cases.	Deaths.	Remaining under treatment.
Diphtheria.....	10	1	6	Scarlet fever.....	4	—	3
Leprosy.....	—	1	283	Smallpox.....	2	—	2
Malaria.....	—	—	1	Typhoid fever.....	54	6	125
Measles.....	4	—	3	Varicella.....	8	—	7
Paratyphoid fever..	8	—	15				

FRANCE.

Typhoid Fever—Havre.

During the week ended November 7, 1914, 20 cases of typhoid fever with 5 deaths were notified at Havre. Of these cases, 6 were of local origin and 14 occurred among troops.

ITALY.**Quarantine Against Piraeus and Lisbon Suspended.**

According to official notification dated October 26, 1914, the quarantine previously in force at Italian ports against Piraeus, Greece, and Lisbon, Portugal, has been suspended.

JAPAN.**Communicable Diseases.**

Communicable diseases were notified in Japan, exclusive of the island of Taiwan, during the month of September, 1914, as follows:

Diseases.	Cases.	Deaths.	Total since Jan. 1, 1914.	
			Cases.	Deaths.
Diphtheria.....	1,161	232	12,001	3,079
Dysentery.....	5,780	1,231	19,238	3,904
Cholera.....	4	13	4	3
Paratyphoid fever.....	1,145	104	5,114	523
Plague.....			82	69
Scarlet fever.....	48	.....	930	57
Smallpox.....	2	21	425	98
Typhoid fever.....	5,411	967	25,246	4,389
Typhus fever.....	44	12	7,250	1,217

¹ Saga, near Nagasaki.

² Nagasaki.

MEXICO.**Yellow Fever—Merida.**

A case of yellow fever was notified at Merida, November 27, 1914.

SPAIN.**Typhoid Fever—Barcelona.**

The following information has been received relative to the epidemic of typhoid fever reported present in Barcelona, November 4, 1914:¹

The total number of deaths from typhoid fever in Barcelona during the year 1913 was 404, in a population of about 850,000. During the year 1914, to October 28, there were 349 deaths caused by this disease. The total number of deaths from typhoid in September, 1914, was 54, and for the same month in 1913, 59. For the first 28 days of October, 1913, there were 52 deaths and for the corresponding period of 1914, 78 deaths. The number of cases reported in September, 1914, was 439; from October 1 to 28, inclusive, 690. The number of deaths is estimated, from previous statistics, at from 7 to 10 per cent of the cases.

During the month of September, 1914, there were 404 cases of so-called intestinal catarrh, of which 25 resulted fatally to persons over 2

¹ Public Health Reports, Nov. 27, 1914, p. 3215.

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years of age. During the first 28 days of October, 1914, there were 591 cases of this disease and 32 deaths. The number of cases resulting fatally is from 4 to 5 per cent, as based on tabulated statistics.

It is generally conceded that the epidemic is due to a contaminated drinking water supply and strict orders have recently been issued by the authorities to clean tanks and reservoirs.

TRIPOLI.

Plague on Vessel—Tripoli.

A case of plague was reported December 3, 1914, on the steamship *Misurata* in the harbor at Tripoli.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Dec. 11, 1914.

[From medical officers of the Public Health Service, American consuls, and other sources.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java— Batavia.....	Sept. 30-Oct. 5....	114	108	
Moluccas— Menadno.....	do.....	96	96	
Sumatra— Palembang.....	do.....	40	35	
Indo-China: Saigon.....				Oct. 26: 1.
Japan: Saga.....	Sept. 1-30.....	4	3	
Philippine Islands: Manila.....	Oct. 12-24.....	23	13	July 4-Oct. 24: Cases, 482; deaths, 220, including previous reports. July 2-Oct. 5: Cases, 1,131; deaths, 796, including previous reports.
Provinces ¹				
Russia: ² Kief.....	Oct. 3.....			Present.

YELLOW FEVER.

Mexico: Merida.....	Nov. 27.....	1	
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PLAGUE.

China: Shanghai.....	Oct. 19-Nov. 1.....		5	
India.....				Total Sept. 6-Oct. 17: Cases, 9,914; deaths, 6,914.
Japan.....				Total, Jan. 1-Sept. 30: Cases, 82; deaths, 69, exclusive of Taiwan.
Tripoli: Tripoli.....				Dec. 3, 1 case on s. s. <i>Misurata</i> , in the harbor.
Turkey in Asia: Bagdad.....	Oct. 18-24.....	1	1	

¹ For dates and locations of these cases see page 3336.

² From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Oct. 14, 1914.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Dec. 11, 1914—Continued.****SMALLPOX.**

Places.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Montreal.....	Nov. 20-26.....	7.....	.....
Quebec.....	do.....	1.....	.....
China:				
Hongkong.....	Oct. 18-21.....	1.....	.....
Shanghai.....	Oct. 19-Nov. 1.....	.....	9.....	
Egypt:				
Alexandria.....	Oct. 15-21.....	3.....	1.....	
Greece:				
Patras.....	Nov. 2-15.....	.....	11.....	
Saloniki.....	Oct. 25-Nov. 7.....	26.....	14.....	
India:				
Calcutta.....	Oct. 4-10.....	.....	6.....	
Madras.....	Oct. 11-17.....	1.....	.....
Indo-China:				
Saigon.....	Aug. 29-Oct. 12.....	6.....	3.....	
Japan:				
Hakodate.....	Oct. 18-24.....	1.....	.....
Nagasaki.....	Sept. 1-30.....	2.....	1.....	
Mexico:				
Mazatlan.....	Oct. 29-Nov. 17.....	2.....	.....
Russia:				
Warsaw.....	May 31-June 27.....	25.....	10.....	
Spain:				
Barcelona.....	Nov. 7-13.....	.....	5.....	
Valencia.....	Nov. 1-7.....	23.....	2.....	
Turkey in Asia:				
Tripoli.....	Oct. 18-24.....	2.....	.....
Uruguay:				
Montevideo.....	Sept. 1-30.....	.....	1.....	

Reports Received from June 27 to Dec. 4, 1914.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bohemia— Prague.....	.....	.....	.....	Sept. 23, 1 case in Zizkov, suburb.
Hungary.....	.....	.....	.....	Sept. 25, present in 5 localities. Oct. 1-3: Cases, 378. Oct. 24: Present in Carinthia, Carniola, and Moravia Provinces.
Budapest.....	Sept. 26-Oct. 17.....	6.....	11.....	
Lower Austria— Vienna.....	Sept. 13-Oct. 3.....	12.....	.....	Oct. 8, still present.
Ceylon:				
Colombo.....	June 14-20.....	1.....	1.....	Present in Kumbalagamuwa and the neighboring tea estates.
Uda Pussellawa, district.....	June 7-13.....	.....	.....
China:				
Amoy.....	Aug. 23-Sept. 12.....	1.....	1.....	
Kulangsu.....	Aug. 1.....	1.....	.....
Hankow.....	July 12-18.....	1.....	.....	From up-country districts.
Chaochowfu.....	July 4.....	.....	.....	Present.
Canton.....	Jan. 1-Apr. 30.....	4.....	.....
Hongkong.....	May 17-23.....	1.....	1.....	
Do.....	Sept. 27-Oct. 3.....	1.....	1.....	
Dutch East Indies.....	.....	.....	.....
Celebes.....	.....	.....	.....
Gorontalo.....	Sept. 16.....	.....	.....
Macassar.....	July 12-Sept. 12.....	138.....	122.....	Present.
Java—				
Batavia.....	June 28-Sept. 26....	38.....	31.....	
Samarang.....	Aug. 30-Sept. 12....	1.....	1.....	
Moluccas—				
Menado.....	June 21-Sept. 26....	97.....	69.....	
Sumatra—				
Palembang.....	Aug. 2-Sept. 26....	132.....	69.....	

December 11, 1914

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Germany				Nov. 20, 1 fatal case in Alteberun and Tischau, and 1 case in Myslowitz, in Silesian Prussia.
Greece:				
Piraeus.....				Oet. 15: Cases, 1, from Gallipoli Village.
Surgun, Tschadalza.....	July 22.....	1.....		
Viza.....	do.....	1.....		
India:				
Bassein.....	Apr. 26-June 29.....	84.....	65.....	
Bombay.....	May 17-Oct. 17.....	281.....	177.....	
Calcutta.....	May 10-Oct. 10.....		326.....	
Cocanada.....	July 18-Aug. 12.....		41.....	
Kashmir, Province.....				Endemic. Aug. 18, increasing.
Madras.....	May 31-Oct. 17.....	1,454.....	1,000.....	Epidemic from Aug. 15.
Moulinein.....	June 7-13.....	1.....	1.....	
Negapatam.....	May 14-Aug. 27.....	31.....	31.....	
Rangoon.....	Apr. 1-Aug. 31.....	29.....	28.....	
Indo-China:				
Baria.....	July 1-31.....	18.....	15.....	
Battambang.....	June 11-July 31.....	5.....	5.....	
Cholon.....	July 1-31.....	6.....	3.....	
Hanoi.....	May 1-July 31.....	2.....		
Saigon.....	Jan. 1-July 31.....	8.....	5.....	
Socstrang.....	May 10-20.....	3.....	3.....	
Searieng.....	July 1-31.....	1.....	1.....	
Travinh.....	Jan. 1-July 31.....	43.....	27.....	
Japan:				
Karatsu.....	Oct. 2.....	2.....		Coaling station 50 miles from Nagasaki, see P. H. R. Oct. 9, 1914, p. 2731.
Persia:				
Anzali.....	June 15.....	1.....		
Philippines Islands:				
Manila.....	July 4-Oct. 3.....	352.....	194.....	
Provinces:				
Bataan:				
Orani.....	Aug. 7.....	1.....	1.....	
Rizel.....				Total July 4-Aug. 27: Cases, 77 deaths, 44.
Malaban.....	July 4-Aug. 27.....	18.....	7.....	
Pateros.....	July 7-Aug. 2.....	3.....		
S. P. Macati.....	July 12-20.....	6.....	2.....	
Pasay.....	July 16-Aug. 19.....	6.....	2.....	
Pasig.....	July 17-19.....	4.....	3.....	
Laspinas.....	July 21.....	1.....		
Paranaque.....	do.....	1.....	1.....	
Navotas.....	July 26-Aug. 27.....	19.....	19.....	
Caloocan.....	Aug. 1-25.....	6.....	2.....	
Jalajala.....	Aug. 17-23.....	13.....	8.....	
Bulacan:				Total July 21-Aug. 27: Cases, 241; deaths, 166.
Paombong.....	July 21-Aug. 17.....	21.....	17.....	
Calumpit.....	July 21-Aug. 23.....	18.....	14.....	
Baliuag.....	July 21.....		1.....	
Hagonoy.....	July 23-Aug. 27.....	129.....	77.....	
Meycauayan.....	July 25.....	5.....	3.....	
Polo.....	Aug. 2-25.....	9.....	9.....	
Obando.....	Aug. 3-27.....	12.....	9.....	
Malolos.....	Aug. 10-27.....	44.....	34.....	
Bulacan.....	Aug. 16-22.....	2.....	2.....	
Bocage.....	Aug. 23.....	1.....		
Cavite:				Total Aug. 1-7: Cases, 5; deaths, 6.
Cavite.....	July 9-Aug. 7.....	4.....	5.....	
Imus.....	Aug. 1.....	1.....	1.....	
Iloilo:				Total July 20: Case, 1.
Iloilo.....	July 20.....	2.....		
Pampanga:				Total Aug. 6-27: Cases, 37; deaths, 19.
Minalin.....	Aug. 6-7.....	2.....	2.....	
Masantol.....	Aug. 7-25.....	27.....	15.....	
Macabebé.....	Aug. 8-27.....	7.....	1.....	
Apalit.....	Aug. 10.....	1.....	1.....	
Pangasinan:				Total Aug. 23: Cases, 4; deaths, 3.
Binalonan.....	Aug. 23.....	4.....	3.....	
Taybas.....				Total Aug. 3: Cases, 2.
Lubcan.....	Aug. 3.....	2.....		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Podolia.....				
Bratzlaw.....	July 26-Aug. 2.....	1		
Jampol.....	July 19-Aug. 2.....	25	8	
Letichev.....	July 10.....	2	2	
Litine.....	July 26-Aug. 8.....	8	3	
Vinnitsa.....	July 19-Aug. 2.....	220	74	
Warsaw.....				Aug. 30, present.
Siam:				
Bangkok.....	Apr. 19-Sept. 5.....		287	
Straits Settlements:				
Singapore.....	May 10-Sept. 19.....	152	122	
Turkey in Asia:				
Egrell, Konieh.....	July 19.....		1	
Eski-Cherli.....	July 23-24.....	2	1	
Kamaran.....	Sept. 29.....	1		From a vessel.
Tagadima.....	July 29.....	2		
Turkey in Europe:				
Adrianople.....	May 14-19.....		2	
Constantinople.....	July 15.....	1		

YELLOW FEVER.

Brazil:				
Bahia.....	May 10-Oct. 10.....	21	18	
Pernambuco.....	May 1-15.....		1	
Ecuador:				
Guayaquil.....	May 1-Sept. 30.....	6	2	
Do.....	Aug. 1-31.....	4	2	
Mexico:				
Yucatan.....	Nov. 7-13.....	2		In the interior.
Merida.....	Sept. 14-Nov. 13.....	3	2	
Progreso.....	Oct. 8.....	1		
Venezuela:				
Caracas.....	June 1-30.....	1	1	
La Guayra.....	Aug. 16-31.....	1	1	
Maracaibo.....	June 15.....			Present in light form. No cases since.

PLAQUE.

Brazil:				
Bahia.....	May 17-Oct. 31.....	54	35	
Pernambuco.....	May 1-Sept. 30.....		11	
Rio de Janeiro.....				Oct. 3, 1 fatal case.
British East Africa:				
Mombasa.....	June 1-July 31.....		2	
Ceylon:				
Colombo.....	May 19-Oct. 10.....	158	148	
China.....				Jan. 1-Apr. 30, present in Hokschan, Shuntak, Tangching, and Tungkun. Apr. 3-17, present in Kan-lai and San-hu, 20 miles distant from Pakhoi. June 6, still present in vicinity of Swatow. June 20, improving in the Chaotow and Puning districts.
Amoy.....	June 20-July 18.....			Present; July 13, present in inland villages. Aug. 10, diminishing.
Kulangsu.....	May 20.....	1		Present 30 miles north from Amoy.
Canton.....	Jan. 1-June 11.....	1,150		Present.
Chinchew.....	May 30-June 6.....			Total, Jan. 4-Sept. 26: Cases, 2,156; deaths, 1,708.
Fatshan.....	May 13.....			From a vessel from Hongkong. Apr. 3-June 18: Cases, 100. In Kan-lai and San-hu, 20 miles distant.
Hongkong.....	May 10-Sept. 26.....	932	770	
Pakhoi.....	June 18.....	2		
Shanghai.....	Oct. 5-11.....		4	

December 11, 1914

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Cuba.....				Total, Mar. 5-Sept. 17: Cases, 43; deaths, 10.
El Aceite (near El Caney).....	July 27-Aug. 2.....	4.....		Including 2 cases previously reported from vicinity of El Caney; all removed to and previously reported as from Santiago.
Santiago.....				June 30-Sept. 23: Cases, 12 (case Sept. 17 from El Caney); deaths, 4. One of these deaths was a case from El Aceite.
Dutch East Indies:				
Provinces.....				Total, Apr. 1-Aug. 31: Cases, 6,355; deaths, 5,975.
Kediri.....	Apr. 1-Aug. 31.....	1,813.....	1,677.....	
Madioen.....	do.....	614.....	521.....	
Pasoeroean.....	do.....	3,934.....	3,465.....	
Surabaya.....	do.....	344.....	312.....	
Ecuador:				
Guayaquil.....	May 1-Sept. 30.....	30.....	10.....	
Egypt:				Total Jan. 1-Sept. 30: Cases, 206; deaths, 101.
Alexandria.....	June 2-Oct. 7.....	39.....	20.....	
Damietta.....	July 17.....	1.....	1.....	
Ismalija.....	June 3-9.....	1.....	1.....	
Port Said.....	June 9-Oct. 21.....	25.....	12.....	
Provinces—				
Assiout.....	May 25-June 20.....	5.....	1.....	
Charkieh.....	July 13.....	1.....	1.....	
Fayoum.....	May 27-Aug. 13.....	8.....	2.....	
Garbieh.....	Apr. 28-July 21.....	4.....	1.....	
Gizeh.....	May 27-June 21.....	6.....	3.....	
Keneh.....	Oct. 14.....	2.....	2.....	
Menouf.....	June 17.....	1.....	1.....	
Minieh.....	May 23-July 12.....	11.....	5.....	Clear.
German East Africa:				
Dar-es-Salam.....	May 2-June 10.....	7.....	3.....	
Muanza.....	Feb. 21-Mar. 18.....	7.....	5.....	
Great Britain:				
Liverpool.....	Aug. 8-12.....	9.....	3.....	
Greece:				
Chios.....	Aug. 2.....	2.....		Epidemic.
Kara-Burum.....	Sept. 19.....	2.....		Among the military.
Piraeus.....	Aug. 7-Sept. 9.....	16.....	2.....	Sept. 30, ended.
Saloniki.....	Sept. 15.....	3.....		
Syra, island.....	Sept. 3-4.....	1.....	1.....	
Hawaii:				
Paauhau.....	Aug. 17.....	1.....	1.....	
India:				Total Apr. 27-Sept. 5: Cases, 51,956; deaths, 45,014.
Bassein.....	Apr. 26-Sept. 19.....	42.....	40.....	
Bombay.....	May 17-Oct. 17.....	630.....	530.....	
Calcutta.....	May 10-Oct. 10.....		163.....	
Karachi.....	May 24-Sept. 19.....	29.....	28.....	
Moulmein.....	Apr. 26-Sept. 19.....	116.....	114.....	
Rangoon.....	Apr. 1-Aug. 31.....	904.....	783.....	
Indo-China:				Sept. 5, still present.
Cholon.....	Jan. 1-July 31.....	93.....	19.....	Total Jan. 1-July 31: Cases, 1,630; deaths, 1,292.
Phanitet.....	do.....	394.....	330.....	
Phanrang.....	do.....	853.....	489.....	
Pnum Pench.....	do.....	171.....	152.....	
Saigon.....	do.....	73.....	41.....	Saigon and vicinity May 10-Sept. 28: Cases, 203; deaths, 74.
Socstrang.....	May 1-July 31.....	22.....	15.....	
Italy:				Since Sept. 1, 1914, there have been 17 officially reported cases and unauthenticated rumors of others.
Catania.....				Total Jan. 1-Aug. 31: Cases, 81; deaths, 66. Near Yokohama.
Japan:				
Hodogaya.....	June 9-July 3.....	3.....		
O-No district.....	June 9-15.....	1.....		
Taiwan (Formosa)—				
Kagi.....	May 3-Aug. 8.....	303.....	273.....	
Taishoku.....	Aug. 16-22.....		2.....	
Tokyo.....	June 22-Aug. 8.....	14.....	4.....	Total Apr. 18-July 25: Cases, 45.
Yokohama.....	July 5-Aug. 15.....	4.....	4.....	And vicinity. Total May 23-Aug. 15: Cases, 23; deaths, 19.
Mauritius.....	Apr. 17-23.....	2.....		
Do.....	Sept. 17.....	3.....		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Peru.....				Total, Jan. 1-May 31: Cases, 479; deaths, 235.
Ancachs.....				Total, Jan. 1-Mar. 31: Cases, 54; deaths, 20.
Casma.....	Feb. 9-Mar. 22.....	4		Present.
Chimbote.....	Mar. 23-May 2.....			Do.
Quarhuay (Huaylas).....	do.....			Do.
Samanca.....	do.....			Jan. 1-May 31: Cases, 24; deaths, 12.
Arequipa.....				Jan. 31-Apr. 30: Cases, 16; deaths, 7.
Mollendo.....	Mar. 23-Sept. 27.....	17		Jan. 1-Feb. 28: Cases, 4; deaths, 2.
Cajamarca.....				Jan. 1-Mar. 31: Cases, 74; deaths, 35.
Contumaza.....	Mar. 23-May 2.....	3		From Pacasmayo.
Callao.....	Aug. 3-Oct. 15.....	4		Nov. 2, 7 cases in the lazaretto.
Lambayeque.....				Jan. 1-May 31: Cases, 234; deaths, 111.
Chiclayo.....	Mar. 23-May 2.....	3		Present.
Guadalupe.....	do.....	1		
Libertad.....				
Duacamareca (Otzuco).....	Mar. 23-May 30.....			
Moche.....	July 9-Aug. 2.....	2		
Pichipampa (Otzuco).....	Mar. 24-30.....	4		
Salaverry.....	Mar. 23-May 2.....	1		
San Pedro.....	do.....	8		
Trujillo.....	Mar. 23-Sept. 27.....	26		
Lima.....				Aug. 3-Sept. 27, present.
Callao.....	Oct. 8.....			
Unigambal (Santiago de Chuco).....	Mar. 23-June 7.....	16		
Lima.....	Mar. 23-Sept. 27.....	23		
Surco (Matucana).....	do.....	11		
Monsefu.....	Aug. 3-Sept. 27.....	1		
Piura.....				Jan. 1-May 31: Cases, 37; deaths, 21.
Catacaos.....	Mar. 23-Aug. 2.....	4		
La Huesca.....	June 8-July 5.....	1		
Piura.....	Mar. 23-July 5.....	12		
Philippine Islands: Manila.....	May 17-Sept. 19.....	8	8	May 17, 1 case from s. s. Taisang from Amoy; May 23, 1 case from s. s. Linan from Amoy; June 12-20, a fatal case from s. s. Linan from Amoy; June 17, a fatal case in the Philippine General Hospital. First quarter, 1914: Cases, 14; deaths, 10. May 20, 1 case on s. s. Rubi from Hongkong.
Cebu.....				
Portugal: Lisbon.....	Oct. 8-9.....	8	8	Pneumonic form.
Russia: Astrakhan Government.....				Total, May 25, July 15: Cases, 49; deaths, 46.
Kirghis steppe— Betas-Tschagal.....	May 25-July 15.....	2		7 of these cases pneumonic.
Bulanai.....	May 25-June 14.....	10	10	
Manyisch-Tschagal.....	do.....	5		
Kalmuck steppe— Archanskoge-Tehe.....	do.....	4		
Gubia.....	do.....	4		
Schitkur.....	do.....	1		
Senegal: Dakar.....	May 15.....	12		May 17-23, 5 deaths daily among natives.
Siam: Bangkok.....	Apr. 19-Sept. 5.....		17	
Straits Settlements: Singapore.....	May 10-Sept. 19.....	3	3	July 15, present in Azizia, Tarhuna, and Zanzur, vicinity of Tunis.
Tripoli.....				
Turkey in Asia:				
Adalia.....	July 19-Aug. 1.....	2		
Bagdad.....	Sept. 30.....	1	1	Oct. 15, 3 cases present.
Basra.....	June 24-July 19.....	16	8	
Beirut.....	June 16-Aug. 23.....	5		
Hafza.....	Aug. 29.....	1	1	
Jaffa.....	June 5-27.....	4	3	

December 11, 1914

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****PLAQUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia—Continued.				
Kut.....	July 6.....		1	
Mitylene.....	Aug. 2.....			From a steamboat from Bagdad to Basra. Present.
Samos.....	do.....			Epidemic.
Smyrna.....	July 2-Oct. 4.....	9	4	
Union of South Africa:				Total, Sept. 24-Oct. 5: Cases, 29; deaths, 24. 1 fatal case, an European. All pneumonic.
Cape Town.....				
Queenstown and Tarka.....				
Zanzibar:				
Zanzibar.....	July 1-Sept. 14.....	21	14	

SMALLPOX.

Algeria:	Departments—			
	Algiers.....	Mar. 31-May 31.....	7	
	Constantine.....	do.....	7	
	Oran.....	do.....	57	
Arabia:	Aden.....	June 10-Aug. 16.....	2	
Argentina:	Buenos Aires.....	June 1-30.....	1	
Australia:	New South Wales—			
	Sydney.....			Total, May 8-Oct. 22: Cases, 325 in the metropolitan area and 120 cases in the country districts.
Western Australia—	Bunbury quarantine station.....	May 5-June 12.....	8	1 From s.s. Kilchattan, from Bombay, including previous report.
Austria-Hungary:	Galicia.....	Mar. 17-July 25.....	12	
	Lower Austria.....	May 31-June 29.....	2	
	Styria.....	July 5-11.....	2	
	Upper Austria.....	May 17-July 11.....	4	
Belgium:	Liege.....	June 1-6.....		3
Brazil:	Bahia.....	June 1-Oct. 21.....	15	
	Para.....	May 24-30.....		1
	Pernambuco.....	May 1-Sept. 30.....		61
	Rio de Janeiro.....	May 10-Oct. 17.....	3,547	734
Canada:	British Columbia—			
	Vancouver.....	Aug. 18-Sept. 5.....	4	
	Manitoba—			
	Winnipeg.....	June 14-Nov. 7.....	20	
	Ontario—			
	Hamilton.....	Aug. 1-Sept. 30.....	6	
	Niagara Falls.....	July 15-21.....	1	
	Ottawa.....	July 26-Aug. 1.....	1	
	Prince Edward Island—			
	Charlottetown.....	July 16-22.....	1	
	Quebec—			
	Montreal.....	Nov. 8-21.....	8	2
	Quebec.....	July 11-Oct. 10.....	5	
Canary Islands:	Teneriffe—			
	Santa Cruz.....	June 28-Oct. 24.....		26
Ceylon:	Colombo.....	May 19-Oct. 10.....	120	27
	Uva district—			
	Passara.....	June 7-13.....	39	11 Among coolies from India.
China:	Amoy.....	May 17-June 13.....		May 16-23, present in Kaying and increasing in Choa Chow.
	Canton.....	Jan. 1-Apr. 30.....	21	Present.
	Chungking.....	May 22.....		Endemic.
	Dairen.....	June 7-July 4.....	2	
	Hongkong.....	May 10-July 18.....	15	12 Total Jan. 4-Aug. 31: Cases, 93; deaths, 70.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 27 to Dec. 4, 1914—Continued.

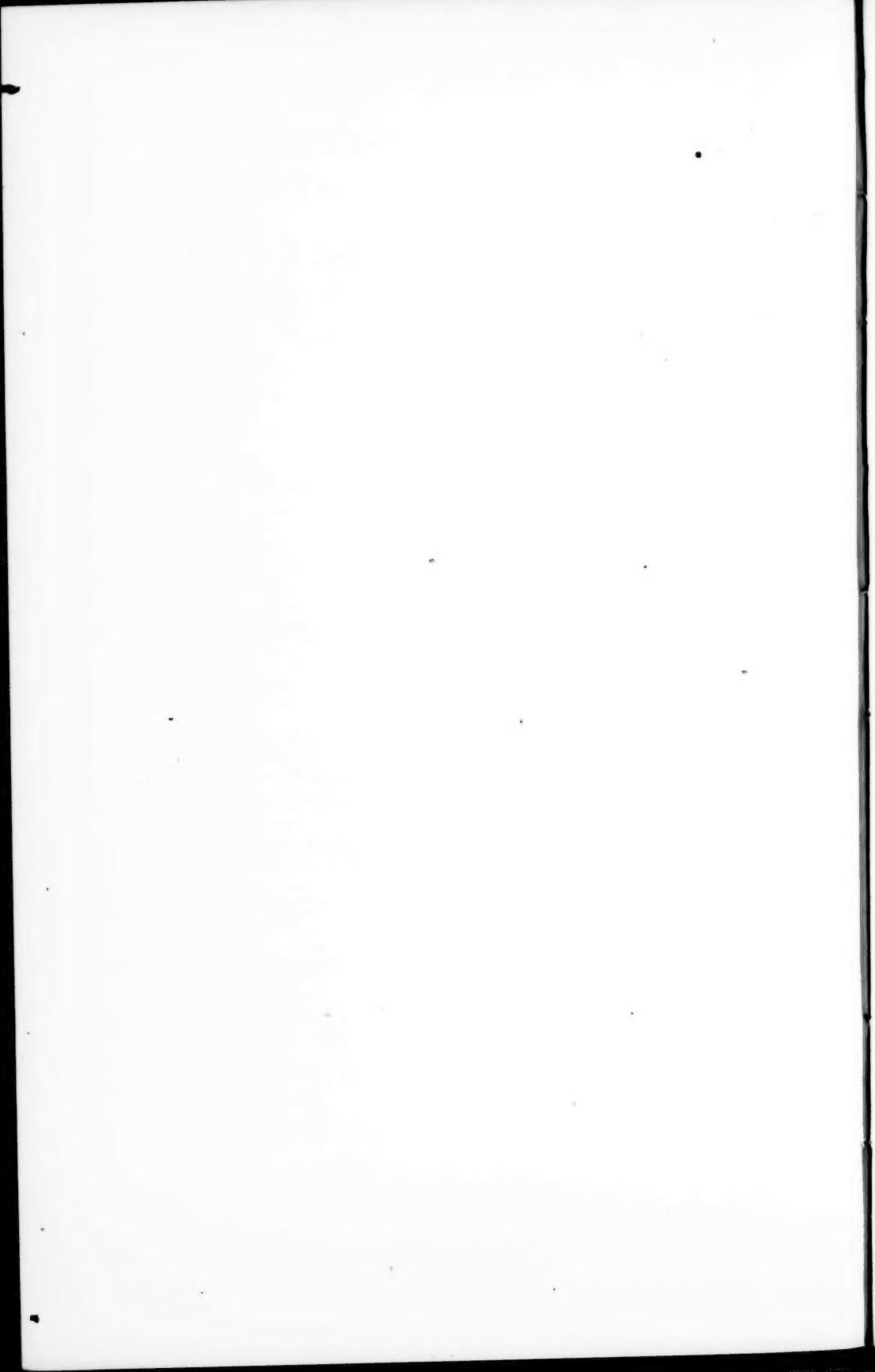
SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Nanking.....	May 13.....			Present.
Newchwang.....	June 13-Oct. 17.....			Do.
Pakhoi.....	Apr. 17.....			Present, and in San-hu, 20 miles distant.
Shanghai.....	May 18-Oct. 18.....	29		Deaths among natives.
Tientsin.....	June 6-Sept. 26.....	2		
Tsingtau.....	May 19-July 5.....	21	3	
Cuba:				
Habana.....	Nov. 2-23.....	4	1	
Dutch East Indies:				
Borneo.....	May 17-Sept. 12.....	700	261	In the western part, Aug. 22, present in Pontianak.
Java:				
Batavia.....	May 3-Sept. 19.....	105	55	In the western part. May 3-
Tegal.....	Aug. 2-8.....	19	6	Sept. 19: Cases, 2,832; deaths, 574, including Batavia.
Egypt:				
Alexandria.....	June 4-Oct. 14.....	43	17	
Cairo.....	May 21-Sept. 30.....	103	77	
Port Said.....	May 21-June 6.....	4		
France:				
Bordeaux.....	June 7-July 11.....		4	
Marseille.....	May 1-31.....		2	
Paris.....	May 24-Oct. 10.....	35	2	
Germany:				May 31-Aug. 22: Cases, 10.
Hamburg.....	June 7-27.....	5		
Kehl.....	May 1-31.....		1	
Gibraltar.....	June 8-27.....	1	1	
Great Britain:				
Leeds.....	June 6-July 18.....	4		
Southampton.....	June 29-July 4.....	1		
Greece:				
Athens.....	July 6-12.....		1	
Goumeniza.....	Oct. 18-24.....	2		
Kavalla.....	Oct. 4-24.....	3		
Patras.....	Sept. 2-Oct. 18.....		7	
Saloniki.....	May 31-Oct. 24.....		80	
India:				June 6: Present in a mild form among 20,000 refugees from Asiatic Turkey, Chio, and Mitylene, Sept. 19; cases, 2.
Bombay.....	May 19-Oct. 3.....	92	60	
Calcutta.....	May 10-Oct. 3.....		245	
Karachi.....	May 24-July 25.....	13	4	
Madras.....	May 17-Oct. 3.....	40	6	
Rangoon.....	Apr. 1-Aug. 31.....	12	2	
Indo-China:				
Saigon.....	May 12-18.....	2		
Italy:				
Turin.....	July 20-26.....	2		
Japan:				Total Jan. 1-Aug. 31: Cases, 422, deaths, 97, exclusive of Taiwan.
Kobe.....	June 19-23.....	1		
Nagasaki.....	May 18-Oct. 18.....	58	19	
Taiwan (Formosa)	May 3-Oct. 10.....	19	6	
Yokohama.....	June 23-29.....	1		
Honduras:				
Puerto Cortez.....	Sept. 1-30.....		6	
Mexico:				
Chihuahua.....	May 18-Nov. 8.....	18	15	
Guadalajara.....	Aug. 31-Oct. 10.....		3	
Juarez.....	Aug. 1.....	2		
Maratlan.....	June 17-Oct. 27.....	1	4	
Mexico.....	Jan. 17-Feb. 21.....	99	16	
Monterey.....	June 30-Sept. 20.....		9	
Tampico.....	May 11-July 31.....		70	
Vera Cruz.....	June 1-Oct. 31.....	17	6	
Norway:				
Trondhjem.....	June 1-Oct. 31.....	38		
Peru:				
Callao.....				June 22, Aug. 8, and Oct. 8, present.
Lima.....	Oct. 28.....			Epidemic.
Philippine Islands:				
Samar Province.....				First quarter 1914, severe outbreak.
Portugal:				
Lisbon.....	June 14-Oct. 3.....	17		
Portuguese East Africa:				
Lourenco Marquez.....	Aug. 1-31.....		1	

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CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Dec. 4, 1914—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Batum.	Feb. 1-Aug. 31.....	9	.....
Libau.	Oct. 12-18.....	1	.....
Moscow.	May 10-Oct. 10.....	47	9	
Odessa.	May 10-Oct. 3.....	9	.....
Riga.	May 31-July 25.....	14	.....
St. Petersburg (Petrograd).	May 24-Oct. 10.....	300	125	
Vladivostok.	Apr. 2-May 13.....	8	1	
Warsaw.	Feb. 1-May 2.....	146	61	
Serbia:				
Belgrade.	May 25-July 19.....	12	2	
Siam:				
Bangkok.	June 13-Sept. 5.....	.....	10	
Spain:				
Almeria.	July 1-31.....	.....	1	
Barcelona.	June 14-July 31.....	.....	28	
Cadiz.	May 1-31.....	.....	5	
Madrid.	June 1-Oct. 31.....	.....	0	
Seville.	Sept. 1-30.....	.....	1	
Valencia.	June 7-Oct. 31.....	89	16	
Straits Settlements:				
Singapore.	Sept. 27-Oct. 3.....	.....	1	
Switzerland:				
Cantons—				
Basel.	May 31-Sept. 19.....	34	.....
Geneva.	July 5-11.....	1	.....
Grisons.	June 7-13.....	1	.....
Zurich.	July 1-Aug. 8.....	2	.....
Turkey in Asia:				
Beirut.	June 1-Oct. 24.....	94	39	
Damascus.	Mar. 15-Aug. 20.....	505	400	
Jerusalem.	May 3-July 25.....	33	2	
Mersina.	Aug. 2-8.....	2	.....
Smyrna.	May 13-Oct. 3.....	8	7	
Trebizond.	May 19-Oct. 17.....	.....	
Tripoli.	Oct. 3-10.....	4	.....
Turkey in Europe:				
Constantinople.	June 14-Sept. 12.....	.....	9	
Union + South Africa:				
Pretoria.	May 9-23.....	1	.....



SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

DISTRICT OF COLUMBIA.

Foot-and-Mouth Disease—Prevention of Introduction and Spread of. (Reg. Comrs., Nov. 13, 1914.)

SECTION 1. No person shall bring into the District of Columbia any animal affected with foot-and-mouth disease or any animal suspected of being so affected or which has been exposed to said disease, or bring into said District from any area quarantined by the United States Department of Agriculture on account of said disease any bovine animal, sheep, goat, swine, or deer, or hide, skin, hay, straw, fodder, or hoof not accompanied by a proper official certificate to show freedom from infectivity.

SEC. 2. Every person in the District of Columbia having the ownership, custody, or care of any animal in said District affected by foot-and-mouth disease, or any animal suspected of being so affected, shall immediately on becoming aware of that fact or suspicion report the circumstances at once to the health officer of said District in person, by telephone, or in writing, definitely identifying such animal and designating the place where it may be found. And every veterinary surgeon called upon to examine or to treat any such animal shall in like manner make report thereof.

SEC. 3. Every person in the District of Columbia having the ownership, custody, or care of any domestic animal, or of any premises, material, or thing that has been exposed to infection by foot-and-mouth disease; or of any bovine animal, sheep, goat, swine, or deer, or of any hide, skin, hay, straw, fodder, or hoof that has without proper official certificate to show freedom from infectivity been brought into said District from any area quarantined by the United States Department of Agriculture on account of said disease, shall immediately upon becoming aware of such circumstances report them in person, by telephone, or in writing, in detail to the health officer of said District.

SEC. 4. Every person in the District of Columbia having the care or custody of any premises, animal, material, or thing which has been exposed to infection by foot-and-mouth disease and is liable to convey said disease, or any bovine animal, sheep, goat, swine, or deer, or hide, skin, hay, straw, fodder, or hoof that has without proper official certificate to show freedom from infectivity been brought into said District from any area quarantined by the United States Department of Agriculture on account of said disease shall so isolate, care for, disinfect, renovate, destroy, or dispose of the same, to the satisfaction of the health officer of said District, as to prevent danger of the conveyance of said disease.

SEC. 5. Any officer or agent of the health department of the District of Columbia may at any time enter upon any premises where said health officer has reason to believe there is any animal suffering from foot-and-mouth disease; or any animal, material, or thing which has been exposed to infection by said disease and is liable to convey the same; or any bovine animal, sheep, goat, swine, or deer, or hide, skin, hay, straw, fodder, or hoof brought into said District from any area quarantined by the United States Department of Agriculture on account of said disease and may examine and inspect the same.

SEC. 6. Whenever in the judgment of the health officer of the District of Columbia such action is necessary to prevent the spread of foot-and-mouth disease, said health officer may order the closing, renovation, or disinfection of any premises, or of any public water trough, or the isolation or the destruction of any animal, material, or thing, specifying the manner and time thereof; and in event of noncompliance said health officer may, through officers and agents in the employ of the District of Columbia, carry such order into effect.

SEC. 7. Whenever in the judgment of the health officer of the District of Columbia such action is necessary to prevent the spread of foot-and-mouth disease, said health officer of said District may order the quarantine of any premises or of any part thereof, or of any animal, material, or thing thereon in said District which, in his judgment, may convey foot-and-mouth disease, and may cause such placards to be posted and such guards to be employed as in his judgment may be necessary to enforce said quarantine.

SEC. 8. Every person owning or having custody or care of any premises, animal, material, or thing in the District of Columbia, infected or suspected of being infected by foot-and-mouth disease, and of any bovine animal, sheep, goat, swine, or deer, or any hide, skin, hay, straw, fodder, or hoof, brought into the District of Columbia from any area quarantined by the United States Department of Agriculture on account of said disease, without proper official certificate to show freedom from infectivity, shall render all necessary assistance to any officer or agent of the health department of said District in any lawful action said officer or agent may take with respect thereto, to prevent the spread of foot-and-mouth disease; and, in the case of animals, shall properly secure the same so as to permit such examinations to be made as may be necessary.

SEC. 9. No person in the District of Columbia shall hinder, interfere with, or obstruct any officer or agent of the health department of said District in the discharge of any duty or in the exercise of any right imposed or conferred upon him, or neglect or refuse to comply with any lawful order issued by any such officer or agent.

SEC. 10. Any person violating the provisions of these regulations shall upon conviction thereof be punished for each offense by a fine not exceeding \$40.

GEORGIA.

Births and Deaths—Registration of. (Act 466, Aug. 17, 1914.)

On August 17, 1914, the governor of the State of Georgia approved an act providing for the registration of births and deaths. The act is substantially the same as the model law for the registration of births and deaths approved by the Bureau of the Census.¹

The salary of the State registrar is fixed at \$1,800 per annum.

Section 3 of the model law is changed by making "each city, each incorporated town, and each militia district" a primary registration district, "and

¹This act in the forms adopted in several States will be found in the Public Health Reports for Jan. 31, 1913, p. 233; Oct. 24, 1913, p. 2264; Nov. 14, 1913, p. 2444; and Dec. 26, 1913, p. 2865.

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that portion of any militia district outside of the cities and incorporated towns therein shall constitute a separate and distinct registration district." The proviso authorizing the State board of health to combine two or more primary registration districts was not adopted.

Section 4 of the model law was changed to read as follows:

That in the cities the city clerk shall be the local registrar, and in the incorporated towns the town clerk shall be the local registrar, and that in the militia districts of the State the justices of the peace and notary publics and ex officio justices of the peace shall be the local registrars, and for that portion of the militia districts outside of the cities and incorporated towns therein the justice of the peace and notary public and ex officio justice of the peace shall be the local registrars under the terms of this act. Should there be no justice of peace [sic] or notary public or ex officio justice of the peace in any militia district, or should both of said officials be absent from their district, in that event the justice of the peace or ex officio justice of the peace for any adjoining militia district in said county or of the militia district in which the county site [sic] is situated may perform any of the duties of the local registrar for said district required under the terms of this act; and each registrar shall in such cases note on each certificate, over his signature, the date of filing, and shall forward all certificates to the local registrar of the district within 10 days, and in all cases before the third day of the following month, and if there be no local registrar said district shall be forwarded [sic] to the local registrar of the militia district in which the county site is situated, who shall make all reports for said district to the State registrar and shall perform other like duties of the local registrar for such district under the terms of this act. Any local registrar who, in the judgment of the State board of health, fails or neglects to discharge efficiently the duties of his office as set forth in this act, or to make prompt or complete returns of births or deaths as required thereby, shall be forthwith removed by the State board of health, and such other penalties may be imposed as are provided under section 21 of this act.

Paragraph 20 of section 7 was changed by striking out the words "and address." Under the law as adopted it is necessary for the undertaker or person acting as such to sign the death certificate, but it is not necessary that his address be given.

Section 8 was changed to read as follows:

That in case of any death occurring without medical attendance, it shall be the duty of the undertaker to notify the local registrar of such a death, and when so notified the registrar shall, prior to the issuance of the permit, inform the local health officer, if there be such officer in the district where the death occurred, and refer the case to him for immediate investigation and certification: *Provided*, That when the local health officer is not a physician, and in such cases only, the registrar is authorized to make the certificate and return from the statement of relatives or other persons having adequate knowledge of the facts: *Provided, further*, That if the registrar has reason to believe that the death may have been due to unlawful act or neglect, he shall then refer the case to the coroner or other proper official for his investigation and certification. And the coroner or other proper officer whose duty it is to hold an inquest on the body of any deceased person and to make the certificate of death required for a burial permit shall state in his certificate the name of the disease causing death, or if from external causes, (1) the means of death and (2) whether (probably) accidental, suicidal, or homicidal; and shall, in any case, furnish such information as may be required by the State registrar in order to classify the death properly.

The second paragraph of section 9 was changed so as to make it unnecessary for the seller of a casket to keep a record of the date of death and place of death of deceased, but the other data required (purchaser's name and address and name of deceased) must be recorded by the seller of a casket.

Section 13 was changed so as to authorize the State registrar "upon advice and consent of the State board of health" to determine upon the form of birth certificate to be used.

Paragraph 8 of section 14 of the model law was changed to read as follows:

Full name of father: *Provided*, That if the child is illegitimate, the name of the putative father shall not be entered without his consent, but the other particulars relating to the putative father (items 9 to 13) may be entered if known, otherwise as "unknown."

Section 17 of the model law was omitted from the act. This section provides that hospitals, almshouses, lying-in and other institutions shall keep records of the "personal and statistical particulars relative to the inmates" which are required in the forms of the certificates of births and deaths.

The following paragraph was added to section 18:

At the expiration of six years after the approval of this act certified copies of birth registration certificates shall be accepted by the public school authorities of this State as *prima facie* evidence of age of children registering for school attendance, and no other proof shall be required. At the expiration of 14 years from the passage of this act, certified copies of birth registration certificates shall be required by all factory inspectors, and employers of youthful labor as *prima facie* proof of age, and no other proof shall be required from children born in this State, or States which for 14 years previous to the date of such certificate have had registration laws essentially identical with this act: *Provided*, That when it is not possible to secure such certified copy of birth registration certificate for any child, the school authorities and factory inspectors may accept as secondary proof of age any competent evidence by which the age of persons is usually established.

The first sentence of section 20 of the model law was changed to read as follows:

That each local registrar shall be paid the sum of 25 cents for each birth certificate and each death certificate properly and completely made out and registered with him, and correctly recorded and promptly returned by him to the State registrar, as required by this act, unless the local registrar shall already be acting as such in cities where their compensation is otherwise fixed by law.

Section 21 was changed by leaving out the following:

Provided, That the State registrar shall, upon request of any parent or guardian, supply, without fee, a certificate limited to a statement as to the date of birth of any child when the same shall be necessary for admission to school or for the purpose of securing employment.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

AUGUSTA, GA.

Nuisances. (Reg. Bd. of H., Sept. 29, 1914.)

SECTION 1. That the following facts and things shall be, and are hereby, declared to be nuisances dangerous to human life or to health, and whatever renders the ground, air, food, or water unwholesome and an injury to human health is prohibited:

SEC. 2. The casting, throwing, draining, or discharging, or causing to be cast, thrown, drained, or discharged into any public street or highway, gutter, alley, catch basin (sand trap), yard, or other public place or private grounds within the city of Augusta, any slops, kitchen water, laundry water, sewage, waste or rain water, swill, or filth shall be deemed, and hereby is declared, to be a nuisance; and all ponds, pools, or stagnant water, all heaps and quantities of manure or filth of any kind, any accumulation or deposit of offal or of any decaying animal or vegetable matter in or upon any lot of land near any inhabited dwelling house or any public street or highway, alley, or other public or private place within said city, is declared to be a nuisance; and every person, firm, or corporation creating or maintaining, or aiding in the creation or maintenance of, any such nuisance shall forfeit and pay a penalty of not less than \$5 for every such offense, and in the case of continuing offense shall be liable to a further penalty of \$10 for each and every day after written notice of the offense has been given by the board of health.

Sec. 3. Other nuisances within the city are hereby defined and declared to be, and they shall include and embrace: Placing, depositing, or maintaining in or upon any street or alley, or in or upon any public or private property, any dead animal, or any part of same, filth from privies, or garbage; also any full or overflowing privy or other receptacle for filth; also permitting any manure to be deposited upon any lawn, lot, or place within the city and left exposed; the carrying and transporting bones, hides, fish, offal, or other animal or vegetable substance in a decomposed and offensive condition; any garbage, swill, or other offensive or decomposing solid or fluid matter or substance in which the same may be conveyed or carried through any street or alley, unless the same shall be inclosed in tight and closely covered cans or carts. Every nuisance as above defined is hereby prohibited and forbidden within the city, and any person or persons, firm, or corporation making, causing, maintaining, or permitting any of said nuisances shall forfeit and pay a penalty of not less than \$10 nor greater than \$50.

Sec. 4. No animal or vegetable substance, swill, garbage, street cleaning, or any offensive material, either separately or mixed with ashes or rubbish, shall be deposited on or used to fill in or raise the surface level of any ground, lot, or street.

Sec. 5. Any imperfect trap, sink, or water-closet within any house or yard, or any other drainage appliance or fixture within any yard or house from which there shall arise any foul or obnoxious odor or gas detrimental to human health, is hereby declared to be a nuisance; and any person or persons or corporation who shall refuse or neglect to repair or make perfect any defect in

any drainage appliance or any part of the soil pipe or waste pipe, or any fixture, sink basin, water-closet, or trap attached to said waste pipe or soil pipe, shall forfeit and pay a penalty of not less than \$5 nor greater than \$25.

SEC. 6. Any person or persons or corporation owning any lot or lots bordering on a public or private sewer are required to drain such lot or lots by an underground drain or sewer, with an efficient trap at the opening in each lot to prevent sand or solid substance from being washed into the conduit. The occupant of every lot shall empty all liquid household wastes and washwaters into this sewer, and shall see that the trap is kept clean and the cover of the trap kept closed.

SEC. 7. Any person or corporation who has built, or shall in future build, any drain or sewer in a lot or street in this city, or who shall in anywise use or control such drain or sewer, shall cleanse the same whenever it shall be in an unhealthy condition. The sanitary inspector shall notify the owner or person controlling such uncleanly sewer to clean out same in such time as the health officer may direct; and for every failure to comply with such notice a fine of not exceeding \$25 shall be imposed for each day said nuisance shall continue thereafter.

SEC. 8. That any dwelling house or building wherein people live, congregate, or assemble which is deficient in ventilation, drainage, or other provision essential to health, or is below grade so as to render the walls thereof damp and the rooms unhealthy shall be considered a nuisance.

* * * * *

SEC. 15. To beat, brush, shake, or otherwise clean carpets, rugs, or hangings, or renovate old mattresses in any yard, street, alley, or public place in the city of Augusta is forbidden.

* * * * *

SEC. 30. In case of failure or omission of any owner, agent, or occupant of house, lot, or land to abate any nuisance upon written notice from the board of health to them or their agent within the time specified, the board of health may proceed to abate the nuisance at the expense of the owner or occupant, and as soon as the expense is ascertained, execution shall issue for the same and the amount be levied on and made from his or her or their property.

Premises—Care of. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 9. Any lot which is unclean, filthy, or offensive shall be abated at once by the tenant in charge, unless there be more than one occupant of the lot, or it be a vacant lot, when it becomes the duty of the owner or agent to abate same in the time required. All grass or weeds in yard or lot shall be cut and removed upon written notice from the board of health.

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SEC. 22. Inspectors shall see that all cellars are whitewashed, and the floors thereof freely lined whenever notified by the health officer to do so, which must be at least once yearly. The foregoing is to be done by the tenant in possession. All cellars holding water shall be pumped out and kept dry by the owner of the property.

Spitting—Prohibited in Public Places. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 10. Spitting on any sidewalk, floor of a public building, or street car in this city is a nuisance, dangerous to health. Any person violating this ordinance will be punished by the recorder by a fine of from \$1 to \$5. Policemen, janitors, conductors, and sanitary officers shall see that this ordinance is enforced.

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Privies and Cesspools—Construction and Maintenance. (Reg. Bd. of H., Sept. 29, 1914.)

[The following are declared to be nuisances and prohibited:]

Sec. 11. Any privy in this city the inside of which is not at least 5 feet distance from any street, lane, alley, camp, square, or public place; or any privy or water closet discharging its contents into any lane, alley, or street, or any privy so constructed that it can not be conveniently approached and cleansed: *Provided*, That no surface privy shall exist within 30 feet of any dwelling house in this city, if the yard in which it is located be of such length and width as to permit such privy to be of like distance from the dwellings surrounding it. In such yards as it shall be impossible to obtain 30 feet from contiguous dwellings, then such privy shall be placed equidistant from all the nearest dwellings, as far as practicable. No surface privy shall exist in the city limits of Augusta if possible to connect with a sewer.

Sec. 12. The digging or constructing of any cesspool in the city of Augusta is forbidden.

Wells and Pumps Prohibited. (Reg. Bd. of H., Sept. 29, 1914.)

Sec. 13. No pump or well shall exist in the city of Augusta.

Stables and Disposal of Manure. (Reg. Bd. of H., Sept. 29, 1914.)

Sec. 14. Filthy and unwholesome stables, sheds, pens, or places where cows, horses, mules, or other animals are kept within this city are forbidden.

No uncovered manure pile will be permitted within the city limits. Stable manure may be placed out in the same manner as other garbage for removal by the scavenger department.

Any persons desiring to keep manure upon their premises shall provide themselves with a barrel, pit, or bin, which shall be kept covered at all times with wire gauge netting of sufficiently small mesh to keep out flies.

All stables shall be cleaned out and provided with fresh bedding whenever ordered by the sanitary inspector.

Offensive Trades. (Reg. Bd. of H., Sept. 29, 1914.)

Sec. 16. The boiling of offal, swill, bones, fat, tallow, or lard; the crushing, grinding, or burning of bones or shells; cleaning guts; making glue from any dead animal or part thereof; making or boiling varnish or oil; making lamp-black, turpentine, or tar; distilling ardent, alcoholic, or fermented spirits; storing or keeping scraps, fat, grease, or other offensive animal matter, is forbidden.

Medicine—Distribution of Samples Prohibited. (Reg. Bd. of H., Sept. 29, 1914.)

Sec. 17. The sale, or offering to sell, or distribution of samples other than to druggists and physicians, within the limits of this city, of any medical compound whatever intended for the treatment of any disease of human beings, by any person not a regularly licensed druggist, qualified under the laws of this State authorizing the licensing of druggists, is prohibited under a penalty of not exceeding \$200 or work upon the chain gang not exceeding three months.

Garbage and Refuse. (Reg. Bd. of H., Sept. 29, 1914.)

Sec. 18. The occupant of every lot in this city shall every day (Saturday afternoon and Sunday excepted) remove or cause to be removed from said lot or land all decayed or decaying vegetable and animal substances and, in general,

everything tending to corrupt the air and place the same in cans, buckets, boxes, or barrels on the street edge of the sidewalk opposite said lot or land between the hours of 5 p. m. and 8 a. m. October 1 to March 31 and 6 p. m. and 7 a. m. from April 1 to October 1; and no person shall place or deposit any garbage of any kind from his or her premises on the street or sidewalk at any other time than herein permitted, nor on Saturday afternoon or Sunday; nor shall stenchful garbage be so placed until it has been deodorized. Liquid household wastes must not be placed on public domain for removal by the scavenger carts. Penalty for violating this section not exceeding \$25 for each and every offense.

Orders of Board of Health—Suspension of. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 19. Persons served with any order of this board may, within the time prescribed by said order, apply to the health officer to have said order or its execution stayed or modified, and every person so applying shall have a full and impartial hearing, and the application granted or refused, as the examination shall dictate. This rule, however, shall not operate to cause such suspension in times of universal danger from impending pestilence. All applicants for suspension or modification of the orders of this board shall have the right to produce their witnesses and, both orally and under oath, present the facts upon which their application rests. All witnesses on either side may be fully cross-examined, and counsel may also be heard on behalf of said persons, but not to exceed 30 minutes, unless in particular cases the board may permit more protracted argument.

SEC. 20. The power of the health officer to suspend execution of an ordinance shall extend its suspension until the next meeting of the board, when he shall report every suspension since the last meeting and have the same recorded on the minutes thereof.

Burial—Transportation of Dead Bodies. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 21. The sexton shall not disinter the body of any person buried in any cemetery in this city without first obtaining blank legal form furnished by the board of health and have properly filled out.

* * * * *

SEC. 23. No dead body shall be received into the city of Augusta, Ga., unless accompanied by certificates in compliance with the "Rules of the Georgia State Board of Embalming for the Transportation of the Dead."

Domestic Animals—Keeping of. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 24. The location of stock yards in the city limits shall be only on written permits from the board or the health officer, and only during the pleasure of the board.

A stock yard is hereby defined to mean any lot, yard, or building wherein five or more cattle, goats, or sheep are penned for sale or for private or public use. Hogs can not be received into any stock yard in the limits of this city without permission of the board of health. Hogs will not be permitted in any yard or lot within the city limits of Augusta.

Foodstuffs—Fish—Sale of. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 25. Peddling of fish on any alley or street in the city of Augusta is forbidden.

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Common Drinking Cups—Prohibited in Public Places. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 26. Common carriers, hotels, boarding houses, restaurants, schools, clubs, public buildings, theaters, factories, stores, and all other places where people eat and drink, congregate or patronize, shall not provide any drinking cup, glass, or vessel for common use: *Provided*, That this regulation shall not be held to preclude the use of drinking cups, glasses, or vessels which are thoroughly cleansed by washing in hot water after use, or those provided for each individual use only.

Note.—This regulation does not apply to private houses.

Common Towels—Prohibited in Public Places. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 27. The use of the common towel, or towel to be used in common, by the employees, patrons, frequenters of, or the public in any room, closet, pantry, lavatory, or wash room in or attached to any public place, railroad station, boarding house, warehouse, restaurant, saloon, hotel, club, schoolhouse, office building, public office, store, factory, workroom, markets, or any public place where food or drinks are prepared, served, sold, or stored, used by the public or where persons are employed or patronized, is hereby forbidden.

The term "common towel," as used in these regulations, shall be considered to mean a roller towel, or a towel available for use by more than one person without being washed after such use.

Note.—This regulation does not apply to private houses.

Barber Shops—Sanitary Regulation. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 28. No owner or manager of a barber shop shall knowingly permit any person suffering from a communicable disease, or from a venereal disease in a communicable stage, to act as a barber in said shop.

No person who, to his own knowledge, is suffering from a communicable disease, or from a venereal disease in a communicable stage which might be conveyed to another person by contact, shall act as a barber.

All barber shops, together with all furniture, shall be kept in a clean and sanitary condition.

(a) Mugs, shaving brushes, razors, scissors, clipping machines, pincers, needles, and other steel instruments shall be cleansed and sterilized either by steam, boiling water, or in alcohol of at least 60 per cent strength after each separate use.

(b) A separate clean towel shall be used for each person.

(c) Alum or other material used to stop the flow of blood shall be in powder form and applied only on a towel or other clean cloth.

(d) The use of powder puff and sponges is prohibited.

(e) Every barber shop shall be kept well ventilated and provided with running hot and cold water.

(f) Head rests of chairs shall be covered with a towel that has been washed since having been used before or by clean new paper.

(g) Every barber shall cleanse his hands immediately and thoroughly before serving each customer.

(h) No person shall use a barber shop as a dormitory, nor shall any part of the shop be so used.

(i) No barber shall undertake to treat any disease of the skin or any lesions of the skin whatsoever, such as pimples, boils, warts, moles, and the like.

- (j) The use of rubber bibs is forbidden.
 - (k) No barber shall be allowed to smoke when shaving a customer.
 - (l) Physicians are required to report to the board of health the name of any barber suffering from a communicable disease, and where employed.
- Patrons should be careful not to rub their faces with an unclean hand after being shaved.
- Proprietors of barber shops shall see that these rules are enforced.
- Every barber or other person in charge of any barber shop shall post a copy of these rules in a conspicuous place in said shop.
- Any violation of these rules shall be punished by a fine of not less than \$5 and not more than \$100, or by imprisonment not more than three months, or by such fine and imprisonment in the discretion of the recorder.

Laundries—Sprinkling of Clothes from the Mouth Prohibited. (Reg Bd. of H., Sept. 29, 1914.)

SEC. 29. It shall be unlawful for any person or persons, owning or employed in any laundry in the city of Augusta, to sprinkle the clothing of any person or persons with water emitted from the mouth of said owner or employee.

Communicable Diseases—Notification of Cases—Quarantine—Placarding—Disinfection—Burial—School Attendance—Vaccination. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 32. For the purposes of these regulations the following-named diseases are declared to be either contagious, or infectious, or communicable and therefore dangerous to the public health, and are made notifiable: Acute epidemic anterior poliomyelitis, epidemic cerebrospinal meningitis, chicken-pox, diphtheria, hook-worm disease, leprosy, malaria, measles, ophthalmia neonatorum, pellagra, scarlet fever, smallpox, trachoma, tuberculosis (laryngal and pulmonary), typhoid fever, and whooping cough. Other communicable diseases not named in this list may at any time be declared notifiable as necessity and public health demand, and regulations for their control shall apply when so ordered by the board of health.

SEC. 33. It shall be the duty of every physician in the city of Augusta, Ga., to report by telephone at once to the board of health office, or if closed to the secretary at his home, following by postal card furnished by the board of health, every case of communicable disease declared notifiable which occurs in his practice, or which he may be called upon to attend. When there is no physician in attendance upon any case of communicable disease mentioned it shall be the duty of any person having knowledge of the same, by reason of attendance or upon whose premises a case of such disease is suspected to exist, to make a report as specified.

SEC. 34. *Quarantine, isolation, and observation.*—The following degrees of control are to be carried out in all cases of communicable diseases declared notifiable: Quarantine, isolation, and observation.

SEC. 35. *Quarantine.*—Quarantine is defined to mean and include:

- (a) Strict isolation of the person sick and those attendant upon him in a room screened against flies and mosquitoes.
- (b) Absolute prohibition of entrance to or exit from a building of any persons except the attending physician, health authorities, or any person or persons especially authorized by the health authorities.
- (c) The following-named disease shall be placed under quarantine: Smallpox.

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SEC. 36. *Isolation.*—Isolation is defined to mean and include:

(a) Complete separation of the person sick with the communicable disease and of those attendant upon him from all other persons on the premises in a room screened against flies and mosquitoes.

(b) Prohibition of entrance to and exit from a building except against certain members of the family authorized by the health officers under certain definite restrictions. Persons permitted ingress and egress under this regulation who do not come in contact with the sick may go about their occupations, provided they do not bring them in contact with assemblages of children. They must also refrain from visiting places of amusement, worship, or education.

SEC. 37. *Placarding of premises.*—On all premises where a case of communicable disease exists subject to quarantine or isolation there shall be posted in conspicuous place, front of the house or apartment, white placards bearing the name of the disease in large black letters, with the following warning: "Is in this residence; all persons are warned to keep away."

SEC. 38. *Unlawful to remove placard.*—It is unlawful to deface, mutilate, cover up, or remove this placard without authority of the health officer. Penalty: Fine of not less than \$10 nor more than \$100, or by imprisonment not exceeding one month, or both. The fact of the alteration, destruction, or removal of any such notice shall be considered evidence that such notice was altered, destroyed, or removed by the occupant or persons having possession or control of the house or building upon which such notice is placed or posted, and it shall be the duty of the occupant having charge of the house or building to immediately notify the health officer having jurisdiction of such destruction or removal.

SEC. 39. The following-named diseases shall be placed under isolation: Acute epidemic anterior poliomyelitis, chicken-pox, measles, diphtheria, scarlet fever,

SEC. 40. *Observation.*—Observation is defined to mean and include:

(a) Inspection from time to time by the local health officer of a person suffering from a communicable disease not subject to the regulations for isolation or quarantine.

(b) The supplying of information, printed or otherwise, to such persons relative to the measures for care and prevention of the spread or infection. The health officer shall have such surveillance over such persons deemed necessary to prevent their becoming dangerous to public health.

SEC. 41. The following-named diseases shall be placed under observation: Tuberculosis, whooping cough, ophthalmia neonatorum, typhoid and paratyphoid fever, trachoma, malaria, pellagra, and hookworm disease.

SEC. 42. Persons who have been exposed to a communicable disease may be placed under observation until the period of incubation has elapsed.

SEC. 43. In the event that any of the general provisions for isolation and observation of communicable diseases are found to be violated, the local health officer may enforce quarantine.

SEC. 44. *Release from quarantine.*—When persons confined in a house have recovered from a communicable disease and when other persons confined in the house by reason of exposure, for which quarantine or isolation was established, are considered free from danger of spreading infection, the quarantine or isolation shall be raised by order of the health officer, but not until measures for disinfection applying to the particular disease have been carried out under the direction of the health officer or his authorized assistant.

SEC. 45. No person suffering from any communicable disease subject to quarantine or isolation shall be certified as having recovered therefrom until he is considered entirely free from communicating the disease to others, and the

health officer shall satisfy himself that such is the case before ordering the removal of quarantine or isolation.

SEC. 46. *Unoccupied premises to be cleaned.*—No person shall rent or permit to be occupied any apartment, residence, or building previously occupied by a person who has suffered from tuberculosis, scarlet fever, diphtheria, smallpox, or acute epidemic anterior poliomyelitis until the insides of such apartments shall have been thoroughly disinfected and cleaned under the supervision of a health officer or his assistant.

SEC. 47. There shall not be any public house or church funeral of any person who has died of smallpox, diphtheria, scarlet fever, acute epidemic anterior poliomyelitis, or epidemic cerebrospinal meningitis, and the attendance shall be limited, and only adults allowed to participate in the brief service. The public notice of death of a person dying from one of the diseases enumerated in this paragraph shall state the name of the disease which caused the death.

SEC. 48. No other persons than licensed physicians, undertakers, or nurses in attendance may enter or leave any house or building infected with any communicable disease subject to quarantine or isolation without first procuring permission from the health officer, and obeying absolutely his directions as to all sanitary precautions which he ordered.

SEC. 49. No person recovering from a communicable disease shall leave the sick room or premises where he has been under quarantine or isolation until after removal of the placard, or warning card, by order of the health officer.

SEC. 50. Physicians visiting patients under quarantine or isolation must take all possible precautions to avoid spreading the disease.

SEC. 51. All dogs, cats, or other domestic pet animals shall be excluded from the room of persons ill of diseases requiring quarantine or isolation and should be excluded from the house.

SMALPOX, VARIOLA, OR VARIOLOID.

SEC. 52. In case smallpox is discovered in a house, house quarantine shall be established and the house shall be guarded night and day by a guard or guards appointed by the health officer, the expense of same to be borne by residents of the house at the time: *Provided*, That in case the householder or patient prefers, he or she may be transferred to the contagious-disease hospital and cared for at the expense of the city and county, and provided the householder or patient is unable or unwilling or neglects or refuses to pay the expenses incident thereto, then it shall be the duty of the health officer to have such person or persons so infected transferred to the contagious-disease hospital: *Provided further*, That any resident in a house where a case of smallpox is who has a good vaccination scar upon being revaccinated, and upon proper disinfection of the person and clothing, will be allowed to leave the house and remain away as if he or she had never been exposed to smallpox: *Provided*, That it shall be the duty of the health officer in case smallpox occurs in a house to vaccinate all persons resident in said house and all persons who may have been exposed to the disease, and after vaccination takes on such persons as could not show a good scar, then such persons, after a satisfactory disinfection of their person and clothing, may be released from quarantine by order of the health officer and may be allowed to leave the house not to return again until quarantine is raised. It shall be the duty of the health officer to revaccinate any such person who could not show a good scar and upon whom the vaccination does not take, then such person shall remain upon the premises 14 days after quarantine is raised. When the patient is removed to the hospital for contagious diseases the house or room shall be fumigated by the official fumigator, under the direction

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of the health officer, and the quarantine shall be raised as if the patient had recovered.

SEC. 53. *Smallpox suspects.*—Any person who is found in the house where a case of smallpox is discovered or any person whom the health officer has reason to believe has been exposed to a case of smallpox, and who can not show a good scar, shall be considered a suspect and shall be quarantined according to the rules for house quarantine or removed to the hospital for contagious diseases, but shall not be allowed to further expose himself to those affected with smallpox, and the health officer is hereby required to vaccinate such suspects unless they have been vaccinated by some other physician, and at the end of 7 days to revaccinate such person if the former vaccination has not taken, and the suspect shall be kept in quarantine or in the hospital for contagious diseases for a period of 14 days from the date of last exposure to smallpox, and after the expiration of said 14 days if the said suspect has not developed smallpox he or she shall be released.

SCARLET FEVER.

SEC. 54. *Isolation.*—Every case of scarlet fever shall be isolated in a special room set aside for that purpose and from which all unnecessary furnishings have been removed. Such isolation shall continue even in the mildest cases, for at least four weeks, and in all cases until desquamation is complete. If complications exist such as otitis (inflamed or discharging ears), rhinitis (discharging nose), pharyngitis (sore throat), empyema (pus in pleural cavity), or suppurating glands, the isolation shall continue until these conditions are cured. The average uncomplicated case of scarlet fever usually requires six weeks' isolation.

Placarding of premises.—See regulations 37-38.

SEC. 55. *Disinfection.*—The apartments occupied by a scarlet-fever patient shall be deemed infected and when vacated by death, removal, or recovery of the patient shall, together with their contents, be thoroughly disinfected under the supervision of or direction of the health officer. All persons having occupied such apartments during the period of isolation shall have their clothing disinfected, and shall take a disinfecting bath previous to their release from the isolated apartment. All disinfectants prescribed in this rule shall be a part of the control of the disease.

SEC. 56. *Contacts.*—For exposed children: Children in the house who have not been exposed to the disease should be immediately sent away, if possible, and those who have been exposed separately isolated for at least a week.

SEC. 57. *School attendance after scarlet fever.*—Children convalescing from uncomplicated scarlet fever must not attend school for at least six weeks from the beginning of the disease. The children who have been associated with the patient suffering from scarlet fever shall not attend school for seven days after disinfection of premises and removal of quarantine in quarantined home.

SEC. 58. *Children to be moved from school.*—During the prevalence of scarlet fever in a community teachers and others in charge of schools shall exclude children showing evidence of inflammation of the throat.

SEC. 59. *Sale of milk, etc.*—No milk, butter, or other dairy products shall be sold or given to any person or delivered at any creamery or butter factory from a house where a case of scarlet fever exists.

SEC. 60. No person residing in a house where a case of scarlet fever is under isolation shall be engaged in the handling of milk or other dairy products.

DIPHTHERIA.

SEC. 61. *Isolation.*—Isolate the patient as for scarlet fever and until the secretions from the nose and throat are free from the diphtheria bacilli as shown by two consecutive bacteriological examinations of such secretions, made at intervals of not less than 48 hours by the city bacteriologist, who will report the result of such examinations to the board of health office for release. Culture tubes will be furnished and examination made free of charge.

Instructions relative to the collection of throat smears; securing the swab.—The patient should be placed in a good light and, if a child, properly held. It may be necessary to use tongue depressor to expose the throat thoroughly. If membrane is visible, carefully depress the tongue, and rub the cotton swab freely but gently over the membrane or exudate, especially around the edges, revolving the wire between the fingers so as to bring all portions of the swab in contact with the infected mucous membrane. When membrane is not visible, pass the swab back as far as possible, avoiding the tongue, and thoroughly swab the pharynx and tonsils. Where there is decided clinical evidence of laryngeal involvement, the larynx should be observed with mirror and culture made direct from the larynx. The greatest care should be taken to avoid touching the swab to any except the infected surfaces.

Placarding of premises.—See regulations 37-38.

SEC. 62. *Contacts.*—Children and other persons who have been exposed to diphtheria not residing in a house where a case exists shall be isolated until shown by a bacteriological examination to be free from the diphtheria organism; when such examinations are not made, they shall be kept in isolation seven days from the time of their possible exposure.

SEC. 63. Children and other persons residing in a house in which a case of diphtheria exists shall be detained in their homes or yards until the patient is released from isolation, after which they shall be subject to the restrictions mentioned in regulation 30. Wage earners shall be allowed to continue their occupations when employed in industries other than the production, manufacture, or sale of wearing apparel and foodstuff, and when their employment does not bring them in contact with children.

SEC. 64. *Disinfection.*—Apartments occupied by a diphtheria patient shall be deemed to be infected, and when vacated by death, removal, or recovery of the patient, shall, together with their contents, be thoroughly disinfected. All persons having occupied such apartments during the period of isolation shall have their clothing disinfected and take a disinfecting bath before being released from isolation. All disinfection prescribed in this rule shall be a part of the control of the disease.

SEC. 65. *Sale of milk.*—No milk, butter, or other dairy product shall be sold or given to any person or delivered at any creamery or butter factory from a house under isolation because of the presence of diphtheria therein.

MEASLES.

SEC. 66. *Isolation.*—All cases of measles shall be isolated as soon as the nature of the affection is suspected, and such isolation shall be continued until all catarrhal symptoms have disappeared. Under ordinary circumstances the isolation of a case of measles should last three weeks from the beginning of the invasion. It should be continued longer if there is pneumonia, otitis (inflamed or running ears), or a nasal discharge. The fact of the disappearance of symptoms shall be determined by the physician, and on his report to the board of health office be released by the proper authorized officer.

Placarding of premises.—See regulations 37-38.

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SEC. 67. *Contacts.*—Children and others who have been in contact with measles patients, and those living in the same house where cases are present, shall not be required to be isolated, but shall be prohibited from attending school or other public gatherings for a period of 14 days from last possible exposure. In the event of such children developing catarrhal symptoms, however, they shall be at once isolated.

SEC. 68. *Notification of cases to teachers.*—Principals in charge of schools shall be promptly notified by the board of health of the names of pupils who have developed measles and the names of contacts who have been prohibited from attending school.

SEC. 69. During the prevalence of measles in a community teachers and others in charge of schools shall exclude children presenting catarrhal symptoms indicative of the disease. Teachers shall report to the board of health office immediately the names of pupils who have been so excluded. Before permitting a child to return to school a certificate shall be required from the board of health or attending physician that it is no longer likely to convey infection.

SEC. 70. *Disinfection.*—The discharges and articles soiled by the discharge shall be promptly disinfected during the course of the disease. Terminal disinfection is not necessary, but the room shall be thoroughly aired for 24 hours before it is occupied by a well person.

CHICKEN-POX.

SEC. 71. All persons affected with chicken-pox shall be excluded from school and shall not be allowed to associate with other children.

SEC. 72. *Chicken-pox in adults.*—Chicken-pox in adults occurs occasionally, but as this name is frequently given to evade the diagnosis of mild cases of smallpox it is hereby required that every case be reported and treated by isolation of the adult patient until released by the health officer.

WHOOPING COUGH.

SEC. 73. *Observation.*—While isolation is not necessary, it is forbidden that the patient be allowed to mingle with other children that have not had the disease. Riding on street cars, going to moving pictures, theaters, private parties, churches, Sunday school, or other place where children congregate is strictly forbidden under penalty.

SEC. 74. No patient who is convalescing from whooping cough shall be permitted to return to school until the whoop has ceased for fully one week. This usually requires from six to nine weeks.

No child that has not had the whooping cough, living in a family where whooping cough exists, shall be permitted to attend school.

ACUTE EPIDEMIC ANTERIOR POLIOMYELITIS (INFANTILE PARALYSIS).

SEC. 75. *Isolation.*—The patient shall be isolated for a period of four weeks from the onset of symptoms and according to the rules governing cases subject to isolation.

Placarding.—(See regulations 37-38.)

SEC. 76. Discharges from the throat, nose, and mouth of the patient must be received on cloths and burned at once. Other discharges shall be disinfected before being allowed to leave sick room.

SEC. 77. *Disinfection.*—After death or termination of the case all personal clothing and bedding of the patient, together with the contents of the room

and room itself, shall be thoroughly disinfected and the destruction of any flies assured.

SEC. 78. *Contacts.*—Children, teachers, or others having to do with children residing in an affected household shall be kept under observation until isolation measures have been removed and the premises properly disinfected.

EPIDEMIC CEREBROSPINAL MENINGITIS.

SEC. 79. *Isolation.*—Isolate the patient for a period of at least two weeks from onset of symptoms.

Placarding of premises.—(See regulations 37-38.)

SEC. 80. *Disinfection.*—The discharges from the throat, nose, and mouth of the patient must be received on cloths and burned, or the cloths may be immersed in boiling water or a disinfectant solution. Free ventilation of the sick room and exposure to the sunlight of articles coming from the sick room will suffice in lieu of disinfection.

SEC. 81. Persons living in a house where the disease is present should use disinfectant sprays for the nose and throat and should not mingle with the general public as provided for under the general rules for isolation.

SEC. 82. *Contacts.*—All children from a household where a case is under isolation shall be excluded from school until such time as in the opinion of the health officer all danger of conveying the disease has passed.

TYPHOID AND PARATYPHOID FEVER.

SEC. 83. No person affected with typhoid fever or in charge of a typhoid-fever patient shall so dispose of the excreta or other infectious bodily secretion or excretion so as to cause offense or danger to any person or persons.

SEC. 84. The attending physician shall direct those having charge of a typhoid-fever patient to immediately disinfect all excreta or other infectious bodily secretion or excretions coming from such patient.

SEC. 85. Every case of typhoid fever should be isolated in a room set aside for that purpose, or hospital, and securely screened against flies. The health officer shall order and enforce screening of the apartment or room in which the patient is confined.

TUBERCULOSIS.

SEC. 86. It shall be the duty of a physician attending a case of pulmonary tuberculosis to report every case to the board of health office in the city of Augusta in order that precautionary instructions may be given for the protection of the public. If there shall be no physician in attendance such report shall be made by the relatives of the person afflicted or by the head of the house in which such case resides. This report must be made to the board of health office within three days after the knowledge of existence of such case is obtained. Such report shall show the sex, address, nationality, stage of the disease, and previous residence of person so afflicted, together with present residence.

SEC. 87. If any person with pulmonary tuberculosis changes his or her residence, it shall then be the duty of the house owner, tenant, or agent of the house from which said person has removed to notify at once the board of health office, and such house or the portion thereof occupied by such person shall not again be used for a residence until properly fumigated under the direction of the board of health of this city. No room in any hotel, rooming house, residence, or other place which has been occupied by a person suffering from pulmonary tuberculosis shall be again rented until it is fumigated and rendered sanitary under the direction of the board of health of this city.

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SEC. 88. In the event of the death of a person from pulmonary tuberculosis it shall be the duty of the attending physician to notify the board of health of such death, together with a statement of cause thereof, within 24 hours after death. In the event that no physician is in attendance the party in charge of the remains shall immediately report such death to the board of health office.

No person suffering from pulmonary tuberculosis shall expectorate upon any street, sidewalk, or other place or thing, except some receptacle, cloth, paper, or other device or thing, which is to be destroyed or thoroughly disinfected and sterilized.

TRACHOMA.

SEC. 89. No child suffering from trachoma shall be allowed to attend any private, public, or parochial school, unless under the close supervision of a competent physician, who shall certify in writing to the school board and the health officer that the case is not in a contagious stage.

SEC. 90. Any person afflicted with or having been exposed to any disease mentioned in section 32, and who shall wilfully expose himself in any street, public place, or conveyance—Penalty: Fine of not less than \$25 nor more than \$100, or by imprisonment not exceeding 90 days, or both.

SEC. 91. *Clothing and house furnishings exposed to communicable diseases not to be removed from dwelling until disinfected.*—It shall be unlawful for anyone to buy, sell, give away, or in any manner dispose of to anyone any rags, clothing, bedding, bedclothes, carpets, furniture, or other article which has been used in any room occupied by any person suffering from any such contagious or infectious diseases or which has been exposed to any such contagion or infection, or to send out of any dwelling occupied by any such person any of the above-named articles for the purpose of having the same washed, cleaned, or repaired, unless the same shall have first been disinfected or fumigated in a manner satisfactory to the board of health.

The health officer is directed, if he deems it necessary, to cause the destruction of any of the above-named articles which are not or can not be thoroughly disinfected or fumigated, and to cause any room, house, or part of house in which any person suffering from any contagious or infectious disease has been confined to be immediately and thoroughly disinfected and fumigated.

PROTECTION OF SCHOOLS.

SEC. 92. Pupils actually infected with the following-named diseases shall be excluded from school during the existence of the disease and shall be readmitted only upon presenting a certificate from a licensed physician attesting to their recovery: Pediculosis capitis (head lice), pediculosis corporis (body lice), tinea circinata (ring worm), impetigo contagiosa, favus.

No person suffering from any communicable disease shall be employed as teacher or janitor or in any capacity which brings them in contact with children in any public school in this city.

SEC. 93. No person shall be entered as a teacher, employee, or pupil in a public or private school in the city of Augusta, Ga., unless such person can show a typical scar of vaccination.

SEC. 94. The teacher or principal shall exclude from school any child suspected to be suffering from any communicable disease, pending examination and report from a licensed physician.

SEC. 95. No pupil who has suffered and recovered from a communicable disease while attending school, or who has recently suffered from a communicable disease, shall be permitted to reenter or enter, as the case may be, any school except upon certificate of a licensed and competent physician, setting forth that

all rules and regulations have been complied with, and that the pupil presents no evidence of the disease and is incapable of conveying the infection.

SEC. 96. Teachers residing or boarding in a family in which any disease subject to quarantine is known or suspected to exist shall immediately remove to premises not so infected, and provided they have not been actually exposed to scarlet fever, diphtheria, or smallpox, may be allowed to continue their attendance at school: *Provided*, That in the case of smallpox such teacher has been successfully vaccinated and revaccinated within one year; and in the case of diphtheria and epidemic cerebrospinal meningitis that bacteriological examination of the discharges from the throat proves negative, may be permitted to return to discharge school duties.

Schools—Sanitary Regulation of. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 97. Sanitary drinking fountains and other devices, or individual drinking cups, shall be used exclusively in all schools. Where it is necessary to use a water receptacle, a tank with a faucet shall be provided. A common drinking cup or pail is prohibited.

SEC. 98. Water and soap for hand washing shall be provided. Towels for common use are prohibited. Paper towels are recommended.

SEC. 99. Teachers should instruct pupils to wash their hands immediately after visiting water-closets, outhouses, or comfort stations.

SEC. 100. Dry dusting and sweeping is condemned and prohibited. Before sweeping, light sprinkling of the floor with dampened or oiled (kerosene) sawdust or paper is recommended.

SEC. 101. In dusting, oiled (kerosene) or dampened cloths shall be used. Feather dusters shall not be used.

SEC. 102. *Protection of school and library books.*—School books, or books from public or circulating libraries shall not be taken into any house where Asiatic cholera (cholerine), smallpox, yellow fever, tuberculosis, mumps, infantile paralysis, typhus fever, diphtheria (membranous croup), chicken-pox, whooping cough, cerebrospinal meningitis, scarlet fever (scarletina), exists, and if school books or library books have already been taken into such house, they must be destroyed by owner or library authorities.

If the books are of special value, they must be thoroughly disinfected under the supervision of the health officer.

Penalty. (Reg. Bd. of H., Sept. 29, 1914.)

SEC. 103. That the penalty for the violation of all rules, resolutions, ordinances, or laws of the board of health of the city of Augusta, now in force or hereafter adopted, for which a punishment is not or may not be provided, shall be, upon conviction before the recorder's court, a fine of not less than \$5 nor more than \$100, or labor on the public works of the city, or imprisonment not exceeding 90 days, or any or all, in the discretion of the recorder.

CONNELLSVILLE, PA.

Board of Health—Powers and Duties. Health Officer—Duties of. (Ord. 37, July 6, 1914.)

SECTION 1. That the board of health of the city of Connellsburg shall have the powers and authorities vested in such boards by article 11 of the act of May 26, 1889, P. L., 306, and the act of May 23, 1874, P. L., 259, and any and all other acts of assembly having relation thereto.

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SEC. 2. It shall be the duty of each member of the board of health, immediately after his appointment, to take and subscribe the oath of office provided for city officers, and the board shall meet for the purposes of organization on the first Monday of January each and every year, and shall elect a health officer who shall not be a member of the board and who shall serve for a period of one year and until his successor be chosen, and such other officers of the board whose employment may be required and authorized by law.

SEC. 3. The board of health shall meet regularly once a month, on a day and at an hour to be appointed by it, and shall hold such other special meetings as the conditions of the city may require.

SEC. 4. The board of health shall have general supervision of the sanitary conditions of the city, and it shall be its duty to abate nuisances in accordance with the provisions of acts of assembly in that behalf and the ordinances of the city.

SEC. 5. It shall be the duty of the board of health to submit annually to the council during the month of December of each year an estimate of the probable receipts and expenditures of the board during the ensuing year, and the said board shall, during the month of January of each year, submit a report in writing to council for the preceding year, containing the usual and necessary statistics, together with such other information or suggestions relative to the sanitary and health conditions within the city as it may deem proper.

SEC. 6. It shall be the duty of the board of health to make such reports to the State department of health as is now or may hereafter be required by law.

SEC. 7. The board of health shall provide a suitable minute book and other suitable books of record for the proper transaction of its business and the preservation of the records thereof, and also shall provide placards, notices, circulars of instructions, utensils, and materials for disinfection for the use of the health officer in the performance of his duties, and shall also provide cards for the reporting of communicable diseases to the board of health and cards for the reporting of recovery or death and requests for disinfection, which cards shall be furnished to each physician practicing within the city.

SEC. 8. It shall be the duty of the secretary of the board of health to keep careful and accurate minutes of all proceedings of the board, to keep accurate accounts of the expenditures of the board, to draw and certify all orders upon the treasurer of the city for the payment of moneys authorized by the board of health, vouchers for which shall be signed also by the president of the board and countersigned by the superintendent of accounts and finance; to render statements of expenditures to the board at each stated meeting, or as frequently as they may require; to prepare, under the direction of the board, the annual report to the city council, together with the estimate of the appropriations needed for the ensuing year, and to perform such other and further duties as the board may require.

It shall also be the duty of the secretary of the board to report to the State department of health at the end of each week, and for the fraction of each week occurring at the end of each month, upon blanks supplied by the department to the board of health for that purpose, a list of the cases of communicable diseases specified in the act of May 4, 1909.

SEC. 9. The health officer shall be the police officer of the board of health. He shall attend all stated and special meetings of the board, and shall at all times be ready and available for the prompt performance of his duties.

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SEC. 12. It shall be the duty of the health officer to thoroughly acquaint himself with the provisions of the acts of assembly relating to his duties, and the

powers and duties of the board of health, the ordinances of the city relating to public health, and the rules and regulations of the board of health, and to perform such other and further duties regarding the quarantining and disinfecting of premises and persons and the isolation of children from the public and other schools as may be required by law and the regulations of the board of health. He shall promptly notify the principals, superintendents, teachers, and other persons in charge of the public, private, parochial, Sunday, or other schools of the city of all cases of communicable diseases occurring within the city, for which isolation from school is required by law, giving the names of all pupils or other persons suffering from such disease, or having been in contact therewith, and further giving notification that such pupils or other persons shall be excluded from school and shall only be readmitted upon certificate signed by the health officer or a physician authorized so to do by the board of health.

SEC. 13. It shall be the duty of the health officer to make stated sanitary inspections of the streets, alleys, and premises in the city at such time as the board of health may direct, and to report to the board all nuisances detrimental to public health. He shall also, at the direction of the board of health, or upon complaint of citizens or property owners, or otherwise, make special investigations of alleged nuisances and report concerning the same to the board. He shall serve all notices of abatement issued by the board of health, and perform such other duties requiring the abatement of nuisances as the board may direct.

SEC. 14. Under direction of the board of health the health officer shall act as prosecutor in all cases of violation of health laws, ordinances, and rules and regulations, or any prosecutions for the abatement of nuisances detrimental to the public health.

Communicable Diseases—Notification of Cases—Quarantine—Placarding—Disinfection—Burial. (Ord. 37, July 6, 1914.)

SEC. 15. Every physician practicing within the limits of this city who shall treat or examine any person suffering or afflicted with any communicable disease which, under the provisions of the act of May 14, 1909, or any other act, the rules and regulations of the State department of health, or the rules and regulations of the board of health of the city, is required to be reported to the health authorities, shall forthwith report each and every such case to the board on cards furnished for such purpose, and for any failure to so report shall, upon conviction thereof, be liable to the penalty provided by section 24 of the act of May 14, 1909.

SEC. 16. Every physician practicing within this city who shall have in his charge any case of communicable disease which has been placed under quarantine, shall notify the board in writing of the recovery or death of the person afflicted, and request that disinfection be performed, provided that such disinfection and request shall conform to the time specified by this ordinance and by the laws of the Commonwealth, the rules and regulations of the State department of health, or the board of health for the duration of the quarantine period of such disease.

SEC. 17. No physician practicing within the limits of this city shall conceal, or in any way encourage the concealment of any case of quarantinable disease, or in any way hinder or interfere with the health officer or health authorities in the proper performance of their duties.

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SEC. 9. * * * It shall be his [the health officer's] duty to place under quarantine, by posting proper notices for that purpose, and doing all other acts required for that purpose, all places required by the laws of the Commonwealth

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of Pennsylvania to be quarantined. Notices posted for this purpose shall state the name of the disease from which the person or persons is or are suffering, with the warning that the premises are quarantined and shall so remain until the quarantine is removed, by direction of the board of health or according to its standing rules and regulations; that no person shall be permitted to enter or leave, or take any article from the house or premises so quarantined without written permission from the health authorities, except that physicians, nurses, or clergymen may enter, and that no person shall deface, cover up, or destroy the placard or notice of such quarantine, and specifying the penalty provided by law for the violation of the said notice.

SEC. 10. It shall be the duty of the health officer, upon the receipt of information from any source that a case or cases of disease requiring quarantine exists on any premises, to go to such premises and make an investigation concerning such a report. If it is admitted by the householder that there is a case of such disease on the premises, such premises shall immediately be quarantined, as herein provided. If it is admitted that the disease exists and the house is quarantined, or if it is not admitted and the health officer has reason to believe that such disease does exist on the premises, it shall be his duty to take with him on the premises a physician of the board of health, or some other physician deputized by the board, who shall make an investigation and diagnosis, and if a case of such disease is found to exist upon the premises such physician shall thereupon regularly report the facts to the board of health in the manner required by law, and if the premises be not already quarantined it shall thereupon be the duty of the health officer to immediately quarantine the same under the provisions hereof.

SEC. 11. Quarantine of such places shall be maintained for scarlet fever and smallpox for a period of at least 30 days from date of onset of the last case on the premises, for chicken-pox, diphtheria, measles, German measles, and mumps, for a period of at least 21 days from the date of onset of the last case on the premises, and for whooping cough, erysipelas, and all other diseases subject to quarantine, until complete recovery of the last patient afflicted.

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SEC. 18. It shall be the duty of all undertakers who shall receive and prepare for burial the bodies of any persons who have died within the limits of this city as the result of any of the diseases set forth in section 17 of the act of May 14, 1909, to strictly observe the provisions of the said act, as well as any further rules and regulations of the State department of health, or of the board of health of this city. The undertaker or person acting in such capacity shall be responsible for any violation of such provisions, and shall be subject to the penalties provided by said act.

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SEC. 28. No person shall secrete or otherwise keep on their premises, unknown to the board of health, any person suffering from a communicable disease which is by law required to be quarantined. No person shall refuse to admit the health officer or a physician deputized by the board of health to their premises at any time, nor shall in any manner interfere with or hinder any representative of the board of health in the performance of their duties in making investigation of the suspected case of communicable disease or nuisance, or any other matter which might be a menace to the public health.

Milk and Cream—Sale of—Permit Required. (Ord. 37, July 6, 1914.)

SEC. 19. No person, firm, or corporation shall sell milk or cream, either wholesale or retail, either by vending or from a fixed place of business, without a license from the board of health having first been obtained, the number of which

shall be conspicuously displayed on his wagon or at his place of business, as required by law.

SEC. 20. All licenses shall be valid for the term of one year, subject, however, to revocation by the board of health for any violation of the laws of the Commonwealth or the ordinances of the city or the regulations of the board.

SEC. 21. All licensees for the sale of milk shall be granted without fee or charge, unless required by some other ordinance, but no applicant shall be entitled to receive such license until he shall have conformed to the requirements of the board of health and shall have furnished full information concerning the source of his milk supply and the methods by which it shall be handled: *Provided*, That no license required under the provisions of any other ordinance shall dispense with the necessity for the license hereby required.

SEC. 22. All persons dealing in milk shall deliver it to the consumer in original bottles which have been properly sterilized by boiling, and only within two hours after milking and then securely capped.

Foodstuffs—Care and Sale. (Ord. 37, July 6, 1914.)

SEC. 23. No person, firm, or corporation who shall conduct any store, shop, stand, or delivery wagon within the limits of this city for the sale of meat, fish, butter, eggs, fruit, vegetables, bread, or any other article of food which is subject to decay, mold, or decomposition, shall have or keep in or about such store, stand, or wagon any meat, fish, butter, eggs, fruit, vegetables, bread, or other articles of food which are so decayed, decomposed, putrid, or spoiled as to render them unwholesome, offensive, or otherwise unfit for human consumption.

SEC. 24. All stores, shops, stands, and wagons from which articles of food are vended or stored must at all times be kept clean and in a sanitary condition, free from offensive odors or any accumulation of decomposed animal or vegetable matter and shall at all times be open to the health officer of the city or other authorized agent of the board of health.

SEC. 25. No person, firm, or corporation selling meat, fish, fruit, or vegetables shall expose them on sidewalks or on outside counters at stores, shops, or on stands or in wagons, unless they shall be placed $2\frac{1}{2}$ feet from the ground, pavement, or floor, and shall be thoroughly screened and protected from flies.

Domestic Animals—Disposal of Dead Bodies. (Ord. 37, July 6, 1914.)

SEC. 26. The carcass of any animal which shall have died within the limits of the city shall be removed within 24 hours and properly disposed of by the owner of the animal if the owner be known, or by the owner of the property on which the dead animal is found, or in case the ownership is unknown and the carcass is found on the highway or other public place, it shall be removed by the board of health at the expense of the city. The disposal of all dead animals shall be under the direction of the board of health and in accordance with the laws of the Commonwealth. The owner of any such dead animal or of the property on which it is found, where the owner is known, shall be liable for the payment of the costs of the removal thereof, if done by the board of health, which costs shall be collected by the city in any manner provided by law for that purpose.

Garbage—Disposal of. (Ord. 37, July 6, 1914.)

SEC. 27. Garbage as herein used is intended to include all kinds of organic kitchen refuse. All garbage shall be either burned on the premises where it accumulates, within a stove, furnace, or incinerator, or it must be kept in

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tightly covered metallic cans not too large for convenient handling, which cans must be emptied and their contents removed and properly disposed of at least twice a week during the months of May, June, July, August, September, and October and at least once a week during the remaining months of the year.

Nuisances. (Ord. 37, July 6, 1914.)

SEC. 29. No person shall maintain, or permit to be maintained, on property owned or kept by him or her within this city any condition productive of a nuisance detrimental to the public health, or which may be so declared by the board of health, and upon receipt of notice from the board of health that such condition exists on the property owned or kept by him or her, it shall be his or her duty to abate the nuisance created thereby to the satisfaction of the board of health within the time limit specified in such notice.

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SEC. 31. No person shall place in any public highway or square of this city any tin cans, broken glass, or other objectionable refuse or organic matter subject to decomposition, either vegetable or animal, nor allow any waste from any property owned or occupied by him or her to run into any alley or street or any open gutter along any street or alley, or to accumulate upon the surface of the ground at any place in such manner as to be offensive or to constitute a menace to health.

Privies and Cesspools—Construction and Maintenance. (Ord. 37, July 6, 1914.)

SEC. 30. No person shall install, use, or maintain any system or disposal of sewage either by privy, cesspool, or by a connection with a municipal or other sewer system except such method be in accordance with a regularly adopted system which has been planned by a competent sanitary engineer and approved by the board of health. All cesspools, privy vaults, and sewer connections must be constructed and maintained in accordance with the system so approved and adopted.

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SEC. 33. Any person, firm, company, or corporation using, maintaining, or owning any privy, cesspool, or water-closet abutting on or adjoining any street or alley on which is located a public sewer, shall connect such privy, cesspool, or water-closet with such sewer in such manner as to carry away all refuse deposited therein, whenever and wherever said sewer connection shall not exceed 50 feet in length between property line and sewer.

If any person, firm, company, or corporation shall violate this provision of this ordinance and shall persist in and continue to violate the same, due notice of such violation having been given by the mayor, then and in that case such condition shall be remedied by the city making all such alterations and connections as shall be deemed necessary, the cost thereof to be collected as other debts due to the city are collected.

Penalty. (Ord. 37, July 6, 1914.)

SEC. 32. Any person or persons charged with any duty or obligation hereunder who shall refuse to perform the same, or any person or persons who shall violate any of the provisions hereof, shall, upon conviction thereof, be sentenced to pay the costs of prosecution, a fine not exceeding \$100, and in default of the payment thereof to undergo an imprisonment in the city lockup or county jail for a period not exceeding 30 days, provided that the magistrate before whom such

conviction is had may substitute for the said imprisonment hard labor upon the streets or other place provided for that purpose, and provided further that the penalties fixed by this section shall not apply to violations where the penalty is specifically fixed by act of assembly or some other provision of this ordinance, and provided further that in the case of the abatement of nuisance or like offenses where the offender is directly required to perform some act the sentence shall so require the performance thereof within a specified time, and in the event of failure so to do the payment of the costs thereof when such act is done in his behalf by the city.

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